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## ABSTRACT

TWO rounds of questionnaires were distributed to the 176 members of the Pittsburgh Regional Library Center in order to achieve a consensus on the refinement and prioritization of possible library services and programs by members of the center. Respondents were asked to assign a single importance score to each of the services listed: the first questionnaire achieved a response rate of 64 percent, and the second, which contained a summary of the responses to the first, a rate of 60 percent. Statistical analysis of the responses was based on frequency, mean, and standard deviation measures. Conclusions drawn from the first and second rounds of questionnaires are discussed in relation to priority assessments and possible underlying patterns of relationship. A 9-part appendix to the report consists of: (1) first round responses, (2) second round responses, (3) partitioned rankings, (4) ranked factor variables, (5) pre-Delphi statements, (6) first survey instrument, (7) second survey instrument, (8) coding materials, and (9) selected references.  
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PROGRAMS AND SERVICES TO BE IMPLEMENTED

IN PRLC BY 1982

A DELPHI ASSESSMENT STUDY

FOR THE

PITTSBURGH REGIONAL LIBRARY CENTER

by

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with

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Planned by the  
PRLC Research and  
Development Committee

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School of Library and Information Science

University of Pittsburgh

Pittsburgh, Pa., 1980

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## ONE DEVELOPING THE STUDY

The Pittsburgh Regional Library Center (PRLC) was incorporated 8 September 1967. The PRLC has moved its beginning charter membership of 9 in 1967 to 61 libraries today. The attempt to specify the goals and objectives of the Pittsburgh Regional Library Center and achieve some priority in ranking has been a continuing endeavor. During that time, many expressions of opinion have been advanced as to its goals and objectives such as to:

Improve the overall economic efficiency, service effectiveness, and information handling capabilities of the libraries of each member institution, primarily through joint efforts.

Provide the facilities and organization needed to help solve the research, administrative, and service problems of common interest to the members.

Coordinate the services of the libraries of the member institutions and of the Center with larger library and information systems being developed regionally, nationally and within intellectual disciplines.

PRLC members were surveyed to identify felt needs in 1966, 1968, 1970, and 1973. The 1973 survey results were carefully compiled, and top priorities which appeared at that time were: 1) streamlining interlibrary loan, 2) cooperative development of collections, especially special collections, 3) coordination of acquisitions policies. Second priorities were: 1) reference centers, 2) periodical location for titles not in the Union List, and 3) microfiliming services.

### Study Background

Some of these purposes seemed to have a higher order of priority than others, but no systematic investigation was made. After 1973, efforts appear to have been made on an annual basis with the result that about eight attempts were mounted to deal with the problem. This activity was well spent, however, because several projects and services had been articulated over a period of time. Thus, the overall objectives for the present study could be stated as the refinement and the prioritizing of possible services and programs by all those who saw themselves as associates of the Pittsburgh Regional Library Center.

The objective of this preparatory period of debate, advice and even some pretesting in variant forms has been to provide respondents with a wide range of reasonable alternatives which, when formally rated by the membership in a controlled study, could result in meaningful information on the relative importance of different projects and services. Efforts towards a more systematic approach were initiated in 1975. Questionnaires were sent to the membership and meetings were held in an effort to come to grips with the problem. In all, 114 goals and objectives were identified by the various efforts towards syntheses but priorities were apparently unsuccessful.

In October 1979, a deliberate effort was made to come to terms with the plethora of expectations for the PRL Center. A project team and coordinator were appointed in order to apply a Delphic technique to the numerous statements of goals and objectives. The previously collect statements were reviewed, sorted and edited for consistency of format. The proposal statements of services went through several stages of review. To make the survey as simple and easy as possible for the respondents, the number of items were reduced and held to a minimum.

Some of the items collected in the initial survey overlapped and so the list was pared down by eliminating duplicates and by combining related ones. This was not a simple task and some of the services listed could be considered combinations. However, the quality of articulation was of lesser importance than the process of doing so. It was considered to be more useful to the objectives of the project to obtain response from the potential users and report it back to them in their own phasology than to seek out such types of services as may be articulated in the literature.

After this preliminary review, the first version of the questionnaire was prepared. The format and content of the items were discussed with the project advisors and others. Finally, the initial version was pretested by being administered in two preliminary rounds to the executive committee and others for consideration and review. As a result of this screening, the 114 original statements were reduced in number to those that were considered unique enough for final rating without loss of information.

The purpose of this discussion, reaction and testing was designed to provide the eventual respondents to the study with a range of reasonable alternatives in service that could be rated and which would help them suggest other approaches as possibly more relevant to their own needs and interests. It was expected that the result would be to obtain more meaningful information on the relative importance of different types of services that was understandable to, and which addressed their own perceived frame of reference.

When the reviews were completed, the formatted instrument was prepared. The final choice of services included in the questionnaire may have been the responsibility of the research team and the coordinator but they were couched in broad enough categories so as to encompass the objectives of Center's services and allow for the interpolation of alternative viewpoints to be obtained in the first round.

Respondents were asked to assign a single importance score to each service. Instructions accompanying the instrument defined importance in terms of how the respondent would need the service in the pursuit of particular objectives. Each service listed was to be rated on a ten-point scale from 0 to 9 according to the following descriptive phrases:

- 0 = of no importance
- 2 = of very little importance
- 4 = of slight importance
- 6 = of moderate importance
- 8 = of great importance
- 9 = of very great importance

Respondents are usually chosen in a delphic study to provide a broad representation from competent and interested individuals in the areas being investigated. The present study was not done on a random sample but conducted among all of the members of the Pittsburgh Regional Library Center. The inventory of subjects queried in the first round totalled 176.

Two copies of the questionnaire were mailed to the respondents accompanied by cover letters from the PRLC Executive Director and the research coordinator. One telephone call was made as followup and the eventual return was tallied at 112 or 64.2% of the 176 respondents.

A number of preliminary reviews were made on the returns. Each returned form was examined for comments and additions. Several respondents were moved to make some comments. These were read carefully and those with implications for service were formulated and added to the roster of items for the second round. These additions met the objective of eliciting further expressions of services in articulations relevant to the respondents.

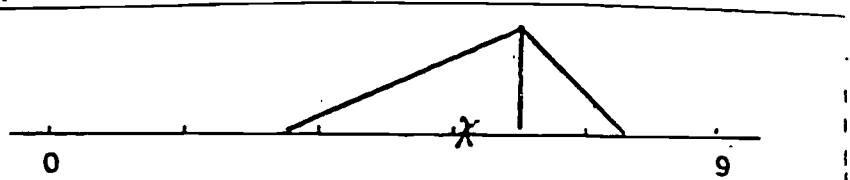
Other aspects of the analyses included the descriptive statistics so essential to a visual presentation of the data to be included in the second round. All response were keypunched including the control variables so essential for eventual partitions such as the following:

<u>Library Type:</u> (check one only)	<u>Position Type:</u> (check one only)	<u>Membership Status:</u> (check one only)
Special _____	Administrator _____	PRLC Member
Public _____	Staff _____	Potential Member
School _____	Technical Services _____	<u>Geographic Location:</u>
Academic _____	Trustee (non-librarian) _____	Pennsylvania: _____
PRLC Staff _____		West Virginia plus Maryland: _____

#### First Round Results:

Each item on the instrument was treated as a separate distribution with the N equal to response and the following statistics were computed and printed out: median, interquartile range and the arithmetic mean. Other statistics could be printed out later if more indepth computations were needed. The initial statistics provided the visual distribution so essential to the feedback to be included in the second questionnaire.

The minimum results to be obtained from this first analysis were the median score and the interquartile range for the distribution of scores for all items. In keeping with the traditions of the delphi technique, feedback to be included in a second questionnaire was provided in the form of a diagram in which the median, the mean and the interquartile range were shown on each scale as illustrated in the following diagram.



Although the median and interquartile range were used for feedback purposes in the second round, further statistical analyses of the data were based upon the mean and standard deviation. As one reviews the first round response (Appendix A) based on the measures of central tendency so far employed, a few observations can be identified as follows:

1. Only three items (1,2,3) could be considered for priority as falling in the category ranging between "great" and "very great" importance.
2. Only four additional items (4,5,6,7) could be considered for second order priority as falling in the category ranging between "moderate" and "great" importance.
3. Twenty items (8-?) constitute a block of services of only moderate importance and of questionable value for priority consideration.
4. Large write-in response which when formatted for inclusion in the second round constituted 26.9% of the total item inventory.

It was obviously too early to draw any conclusion let alone recommendations for the study as a whole. However, some suggestions appeared that helped to serve as trial statements and were considered again after the analyses of second round response such as:

1. Very few programs and services are of any great importance to the respondents as a whole.
2. Respondents were dissatisfied with the "limited" range (as perceived by them) of programs and services offered to them in the first round for rating purposes.

Thus, the first round of the study, as a result of much valuable preparation on the part of various committee efforts over the years, took on the function of a huge group meeting where something like a "nominal group" process yielded forty-nine ranked items and some eighteen additional articulations for a "final" consideration in the second round. This step was a necessary one since it had not previously been included in the previous phases of the study.

The value of this process should not be underestimated. The progressive administrator knows only too well how difficult consensus making can be. All too often it is a frustrating, if not impossible task unless the most recent advances in decisioning methods such as nominal group and related strategies are employed. Methods such as these not only achieve results but they also collect information which when interpreted establish additional empirical evidence. In this regard, the PRLC study has already made an unique contribution.

## TWO

### PRIORITY ASSESSMENTS

"Conclusions" drawn from the first round of this delphi study could only tentatively be advanced. They were presented as reference points in making comparisons with second round results. The membership appears to be quite articulate in suggesting programs and services to improve the Pittsburgh Regional Library Center. However, when it comes to an agreement over which services and programs are to be supported by limited resources, the membership is more careful and deliberate in its selection; only a few items were advanced to priority status.

All items employed in both rounds of this study, have been developed as objectively as possible which is a fundamental element in the Delphi approach. This is done to avoid the undesirable effects of face-to-face communication, such as specious persuasion, the unwillingness to abandon publicly expressed opinions, and the bandwagon effect of majority opinion. Thus, additions to the list were not limited to those articulated by dominant individuals. Semantic noise is also avoided such as that portion of group discussions often directed to matters other than the question at hand.

Open-end response especially on the first round helps the individual to rigorously question personal views and encourages expression in distinguishing between personal views and professional ones. If the reasoning is sound, the

whole group may gain insight on a subsequent round. The purpose of the feedback element (or iteration) in the Delphi Technique is to effect interaction and consensus among the respondents who otherwise would be operating in a totally independent manner. Iteration is the element which distinguishes the Delphi approach from conventional survey research.

Viewing the method from this perspective reveals it to be a significant contribution to survey research. Subsequent rounds in a delphi study generally produce a degree of convergence of opinion. The basic tendency of humans to take a middle of the road position probably lies at the heart of this phenomenon. However, it is counterbalanced at least to some extent, as a consequence of the "expertness" of the experts.

A deliberate effort was made to solicit comments, and the respondents apparently felt moved to make some remarks. These were all read carefully, obviously because of the special interest in them dictated by the nature of the study, but also to determine whether any of the items would have to be reformulated. For the most part, the comments were of a specific nature, and there was no focused criticism of the individual questionnaire items. Consequently, a few item revisions were made for the second round of the delphi study.

The only deletions made were those which were obviously duplications either among themselves or with items previously listed in the first round instrument. In this regard, no a priori judgements were made as to what should or should not be included. Thus, one of the major objectives of the study was maintained: to facilitate involvement and consensus-making by that population directly associated with the Pittsburgh Regional Library Center.

While the preliminary analysis was taking place, a second questionnaire was prepared. This was identical to the first one except for a change in the

cover letter and the addition of the Delphi type "houses" on each scale to indicate the median score and the interquartile range. This new form was sent back to the respondents previously queried in the first round.

Two copies of the second questionnaire were mailed to the 176 respondents identified above under cover letters from the PRLC Executive Director and the research coordinator. Two followup contacts were made: one by letter accompanied by an additional questionnaire; the second by telephone. Total response received was 107 returned questionnaires for a 60.8% return rate despite the two followups.

Essentially, the delphi study attempts to increase the reliability of predictions by providing each respondent with feedback knowledge of group interaction. Generally, a radical revision is not expected in the ranking of survey items from one round to the next, although some changes are likely especially when a 26.9% item increase occurs from the first to the second round.

#### Second Round Results

In this particular study, as has been pointed out, the range of the median-mean scores for the first round was already narrow, so the second-round scores were not expected to show significant decreases in the standard deviations. The resulting rank-order distribution of median-mean scores for the second round is shown in Appendix B.

The second round response has been summarized by median and interquartile range as well as by mean and standard deviation. In addition, the first round rank as achieved by the rating scale has been provided for comparison. As a result, some preliminary observations can be identified such as the following:

1. Only two items (1,2) could be considered for general priority as falling in the category ranging between "great" and "very great" importance.
2. While the median remained constant (8.0) from round to round for these two items the interquartile range decreased and the mean increased slightly for both items (1,2).
3. Only three items (3,4,5) could be considered for general priority as falling in the category ranging between "moderate" and "great importance."
4. For these three items, the median remained constant (7) from round to round, while the interquartile range decreased and the mean increased slightly for only one of the items (3).
5. Two items in the first round (5,7) dropped out of priority status to "moderate importance" when the results of the second round were analyzed.
6. Four items (8,13,16,18) were advanced to "moderate importance" as a result of the 26.9% open-ended item input in the first round.
7. Total items of "moderate importance" remained fairly constant from round to round increasing only from twenty to twenty-one.
8. Four items of "moderate importance" in round one (14,16,23,24) were depressed into "slight importance" in round two.
9. Forty-one statements (61.2% of the total items) which were of "slight importance" or less in the second round remained so from the first round or were add-ons.
10. Four of the add-on statements (items #66, 63,62,58) were in the second round advanced to the status of "moderate importance."

As a result of these preliminary observations, some tentative suggestions may be articulated for consideration. Only two programs and

services (1,2) of "very great importance" to the respondents as a whole, appear to be steady and reliable areas for the investment of administrative time and effort. These are enumerated by second round rank:

1. Expand the union list of periodicals in printed and on-line formats.
2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Top priorities for the respondents remained fairly constant from round to round despite the 26.9% input of new items introduced during round one. There were only three programs and services (3,4,5), of fairly "great importance" to the respondents as a whole, which appear to be worthy of second priority investments of effort. These are enumerated by second round rank:

3. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.
4. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.
5. Develop cooperative purchasing agreement with various jobbers to take advantage of greater discounts.

Two items which were of high priority status in the first round were dropped down to "moderate importance" by the total second round respondents. These items cannot be completely ignored because each of them were perceived to be of high priority status by certain subgroups partitioned from the total respondents (Appendix C). These items are

enumerated by second rank with their control check (\*) in brackets:

7. Establish a regional periodical center as a clearinghouse for acquisition, photoduplication and storage depository, as well as providing bulk rates for subscriptions, also to coordinate the reduction in periodicals/serials subscriptions because of reduced library funding and in order to ensure regional access to journals (05).
11. Improve communications between the Center and among member libraries by exploiting such communications technology as WATS lines, toll-free Center number, TWX machines, facsimile and satellite transmission (07).

From the large add-on response (61.2%), it would appear that a fairly significant number of respondents felt deprived of initial input opportunity. Note may be taken of some of these statements that were added onto the first round of the questionnaire. The following four items were advanced to "moderate importance" and are enumerated by second round rank with the control check in brackets:

8. Hold membership fees and budget down (66).
13. Make it easier for public libraries (small and medium sized) to join PRLC (63).
16. Expand clearinghouse services to include searching of bibliographic data bases, RLIN, WLN, PSU, etc. (62).
18. Separate goals and objectives into short, middle and long-range groups (58).

Even though these four items were advanced only to the status of moderate importance, there is an additional reason for considering them. Each of them was advanced even further to first and second order priority status by certain subgroups partitioned from the total respondents (see Appendix C). In this regard, three additional add-ons (items #67, #61, #57) which were advanced only to "slight importance" in the second round were

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(\*)Control check based on arbitrary order listing in second round.

advanced much further to high order status by certain subgroups (Appendix C). These are enumerated by second round rank together with the control check in brackets:

37. Explore the use of WEBNET as the basis of a local data base, or for the basis of a cooperative circulation or acquisition system (61).
38. Develop an ILL delivery system with UPS Purolator (67).
47. Provide at PRLC an on-site at cost non-professional input into computer a libraries' shelf list for an on-line computerized public catalog (57).

Such comparisons as these above which are made on the changed status of items from round to round are typical of many delphi studies. Comparison helps to answer the question of changed status which is often raised: "in comparison to what?" Such comparisons point out not only comparative status but also the stability of the item among the respondents. Thus, for example, one can place some confidence in the fact that items one and two changed hardly at all from round to round.

Subgroup Partitions:

The response to the second round questionnaire was partitioned by certain subgroups, principally those by type of library and type of position (Appendix C). Such response provides another point of comparison or viewpoint from which the overall ranking of the various items can be considered. In making these comparisons, one should note the Ns (i.e. the size of each subsample). For some of these subgroups the sample is so small as to preclude much if any generalization as is the case among special librarians (7), school librarians (2), PRLC staff (4), PRLC Trustees (1).

In other cases, it is interesting to "compare notes," so to speak.

Even from a quick perusal, it appears that top priority integrity, especially the first two items, was sustained not only from round to round but also among subgroup respondents. But there are variations and these may be worthy of note when the membership and the administration take up the problems of programming and implementations.

Other features of the subgroup response appear to stand out as anomalies. For instance, what led the academic librarians to exclude all items except the first two from either of the two top priority ranks? Or, perhaps conversely, what features appealed to public librarians who in their ratings drew up from the add-ons two items that were ranked in high priority status? Contrary to expectations, it was staff librarians not administrators who expressed concern in their ratings that "membership fees and budgets" be held in line.

This study has made a significant contribution to such problems by gathering and analyzing important data about programs and services in a controlled manner. However, it is difficult to provide reasonably complete answers to these and other questions raised by the study unless further research is undertaken. As an interim and provisional step in this direction, a factor analysis was done on the second round response.

## THREE RELATIONAL CONSIDERATIONS

A factor analysis process was applied to the total number of questions (67) as employed in the second round of the questionnaire. With this method the problems of reducing the data and of determining whether some underlying patterns of relationships may exist in the data were analyzed. When the data is reduced to a smaller set of factors or components than the original 67 variables, then these components might be considered as source variables accounting for the observed interrelationships in the response patterns.

The variables which load onto the factors may be characteristic of some underlying research construct, but they do not necessarily identify or define any one factor precisely. However, those variable sets which have significantly non zero loadings could point towards scaling devices that may become more precise measurement tools. In pointing towards the identification of properties underlying future tests, the study may contribute to the research base of the profession. Thus, the reasons for employing factor analysis are consistent with the general objectives of the study itself:

1. Establish priorities and relationships in the services and programs to be implemented.

2. Work towards more precise ways of measuring the coordinated output of the PRLC.

In considering the value of factor analysis for this study, one must remember that it is difficult if not impossible at this stage of measurement in the profession to attribute precise reality to the factors. It is all too easy to give a factor a name and then to believe that some reality exists behind that name. However, hypotheses generation is a part of research design and, in particular, is a goal of more accurate measurement. By an extension of this study or through additional studies it may become possible to tell whether the emerging research constructs as identified in this investigation are fruitful for empirical examination.

Factor analysis is an extension of other multivariate methods for the analysis of research data. It helps to reduce the number of variables in a study and, in effect, points towards those variables which belong together on the basis of some as yet unmeasurable but fundamental factors of considerable significance. Coefficients of correlation were calculated between each of the 67 variables and every other variable in order to produce a correlation matrix from which the principal factors could be mapped.

The rectangular array of correlation indices was then rotated 90° in an orthogonal rotation in order that the correlation between the factors was reduced to zero. The result of these rather sophisticated mathematical procedures is a matrix or table of coefficients that express the relation between the variables and the underlying factors. An abstract of this matrix appears in Table 1, where only those rotated coefficients are noted that are significantly greater than zero.

The resulting factors become hypothetical constructs whose values

Table 1 Factor Components

FACTOR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	FACTOR
QUF51	.40																		QUEST
QUF52																			QUEST
QUF53																			QUEST
QUF54	.63																		QUEST
QUF55																			QUEST
QUF56	.77																		QUEST
QUF57	.52																		QUEST
QUF58																			QUEST
QUF59																			QUEST
QUF510																			QUEST
QUF511	.50																		QUEST
QUF512																			QUEST
QUF513	.68																		QUEST
QUF514																			QUEST
QUF515	.46																		QUEST
QUF516																			QUEST
QUF517																			QUEST
QUF518																			QUEST
QUF519																			QUEST
QUF520	.82																		QUEST
QUF521																			QUEST
QUF522																			QUEST
QUEST																			QUEST
QUF524																			QUEST
QUF525																			QUEST
QUF526	.41																		QUEST
QUF527																			QUEST
QUF528																			QUEST
QUF529	.56																		QUEST
QUF530																			QUEST
QUF531	.44																		QUEST
QUF532	.70																		QUEST
QUF533	.52																		QUEST
QUF534	.49																		QUEST
QUF535																			QUEST
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QUF541																			QUEST
QUF542																			QUEST
QUF543	.64																		QUEST
QUF544	.79																		QUEST
QUF545	.71																		QUEST
QUF546																			QUEST
QUF547	.59																		QUEST
QUF548	.85																		QUEST
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QUF561	.71																		QUEST
QUF562	.61																		QUEST
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QUF566																			QUEST
QUF567																			QUEST
QUF568																			QUEST
QUF569																			QUEST
FACTOR	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	FACTOR

Note: Circled items refer to secondary loadings significantly greater than zero.

and even content can only properly be estimated from the observed data if and when that data can be reduced to measurable distributions. In general, such factors become convenient descriptive data summarizations with no guarantee of built-in interpretive features. After the principal factors were identified in the correlation matrices, the axes around the estimated components were rotated in order to obtain more meaningful factors within the simplest possible structure.

The purpose of such an orthogonal rotation is to bring most of the loadings of a 'variable close to zero, so that each variable' is more highly correlated with only one or two factors. The result of the rotation makes it easier to interpret each factor as a representative of the effects of that factor on a particular subset of variables. However, even after the varimax rotation, there were still 18 factors upon some of which significantly non zero loadings occurred.

From the simplified matrix it is possible to identify those variables (questions in this instance) which load onto the respective factors as well as the proportionate weight of each of these loadings. In order to facilitate the perusal of the factor loadings, each variable statement (i.e. questionnaire question) has been reproduced and ranked by loading weight under each factor (see Appendix D). Inclusion under each factor may be considered the demarcation limit which appears to be the best estimate, based on the actual data, of significant factor loadings.

It is recognized that factor inclusion and demarcation is relative to the weight of the loadings of each variable on that particular factor. The amount of the variable loading which is subtracted from 1.0 is in fact the amount of the loading which is shared by other factors, possibly all of the 17 (18-1) remaining factors. Thus, as any particular loading

approaches unity (1.0), the variance in that variable left to be explained by other factors becomes less and less.

In the practical world of survey research, a factor loading of unity (1.0) remains only a distant theoretical possibility. Few researchers have ever been willing to identify a specific and invariant cut-off point even though lows of .25 to .35 have been accepted in particular instances. A perusal of the loadings on each factor as they appear in Appendix D will show that no variable has been included with a lower than .40 loading.

Such a low loading is only provisionally accepted in order to accommodate the inclusion of all 18 factors which emerged from the final rotation. However, it is obvious that nearly 60% (.59) of the variance in this variable is explained by the other factors such as 32% by factor #15 and 31% by factor #13. These percentages are circled on Table 1 in order to illustrate the point being made.

For a variety of reasons, it is questionable whether the variable set in Factor #18 as well as Factors #7, or #9 contribute much to an understanding of the underlying phenomena at work in the data. As explained above, the variance in question #64 is almost evenly divided among three factors. In the other factors, despite the weight of the respective loadings, it is difficult to show conceptual relationships based on any research constructs presently available to the profession.

An analysis of the variable sets which load each of the other factors could be useful to the administrator especially those pressured by events to set the agendas for decisioning sessions and inservice training events. It is one thing to call a meeting or schedule a training period for a "one-shot" consideration of a pressing concern. It is quite another

matter to sequence a related agenda set around that pressing concern for the particular staff audience or administrative grouping.

With the results of this study, the harrassed administrator has an objective method based on quantified empirical evidence for making such decisions. The evidence emerging from the respective probabilities offer some measure of assurance that the sequenced agendas will at least initially be more "meaningful" to participants than agendas built on "subjective" comments by a range of informants, however well-intentioned these individuals could be. At the least, the sequenced agendas will probably not be any "worse" than those more subjectively derived.

Three examples are offered in an effort to elucidate what appear to be the underlying phenomena. In addition, the examples may serve to illustrate the application of factor analyses in the communications and behavioral research supporting the administrative enterprise. The examples are taken from Factors #4, #1, and #8 (in order of the following consideration). These factors contain the items (#1, #2) (#3, #4, #5) in the two top priority sets of services and programs as rated by the respondents in delphi round two.

The first example is taken from ranked response summarizing the individual ratings in the second round (Appendix B), variables 1 and 2 (questions 1 and 2) could be considered for general priority as falling in the category ranging between "great" and "very great" importance. Should the PRLC Executive Committee decide to consider priority #1, attention could of course be focused on it alone. However, the Committee also has the option of attending to that priority in relation to either the other variables within the factor itself or in the relation of it to Factor #1 with which that particular item (Question #1) shares about 40% of the variance.

Obviously the strength of the relational probability (40% shared with Factor #1) would seem to be preferable to a consideration of the other variables within the factor. An inspection of the variables in Factor #1 will show that Priorities #3 and #4 are among the variables within the factor set. In addition, their loadings are .63 and .77 respectively on Factor #1 which appears to explain a considerably significant amount of their individual variances. This analysis is strengthened by the fact that the remaining variance of each of them is dispersed throughout the other seventeen factors (#2-#18) without significant loading on any one of them.

Before leaving this first example, another observation may be in order. Upon the basis of further research and evaluation, Factor #4 may eventually be "cleaned up" by the removal of priority variable #1. If so, the variable set loading on Factor #4 begins to "make sense" empirically. This is especially evident when it is noted that public librarians assigned a second order priority to "Hold membership fees and budget down" (see Appendix C).

In relation to Factor #4, the other variables (despite low priorities) could appear to be associated because of their fairly significant loadings on the factor (#4). Although variable #58 (variable control check column) with a #8 priority status has only a .40 loading, the remainder of the variance is spread across the other seventeen factors. Even if the "name and content" of the factor remain as yet unavailable, simple juxtaposition with other variables in the set may offer some measure of elucidation for the high priority given it by the public librarians,

A second example is employed in illustrating the usefulness of these analyses in application. Priority item #2 obtained from the second

round ratings had a .64 loading on Factor #11 (see Appendix D). One other variable (question #9 with a priority ranking of 10) had an .84 loading on the same factor. To "conduct continuing education workshops, etc." based on "needs assessment surveys" appears to be a closely related association which may define the underlying factor.

A third example is obtained from the .60 loading onto Factor #8 of the item with priority #5 (see Appendix D). A look at this item completes this consideration of the five items in priority sets one and two as determined from all the respondents' ratings in round two. The two other variables which have higher loadings (.82 and .73) respectively on the same Factor #8 appear to complete the display of the underlying phenomenon. Further research may substantiate such an observation even though in this study these variables were placed at ranks 67 and 63 respectively.

## FOUR CONCLUDING-SUMMARY

The primary objective of this delphi study has been to maximize item articulation on a "free from constraint" basis and to achieve a degree of consensus in the ranking of various programs and services. This objective emerged from the considerable work done over the years by the PRLC membership as a whole. It was implemented by the Executive Committee as a result of the considerable planning by the PRLC Committee on Research and Development. Thus, no a priori judgments were made as to what items should or should not be included in the instrument.

In this study of programs and services to be undertaken by PRLC before 1982, two rounds of the questionnaires were used in order to obtain responses from the membership and report it back to them in as close to their own phraseology as possible. The rounds of the study took on the function of huge group meetings where something like the nominal group process was employed. The results then could be expected to obtain information on the relative importance of different types of services addressed to a frame of reference meaningful to the membership.

A fairly large write-in response to the first round of the delphi study occurred. These add-on comments obtained some statements which in the second round were advanced to higher priority status. This feedback or iteration of the delphi technique helped to effect some more interaction among respondents. In addition, the consensus achieved during the first round was strengthened and further consolidated around top priority assessments.

The priorities in a delphi study are obtained statistically from the ratings (usually on a 10-point scale) assigned by the respondents to each of the proposi-

tions or statements enumerating the programs and services under consideration. These indices drawn from the actual data included the median and interquartile range as well as the mean and standard deviation as the indicators of central tendency. These statistical indicators were strengthened from the first to the second round.

The analogy of the delphi process as a large group meeting may be appropriate. It does not, however, place sufficient emphasis on the fact of the equal weight of each respondent which can be obtained in a delphi but is highly unlikely under most large group processes. It should be further noted that each weight is scaled and summarized to preserve the individual's role. In a group meeting, on the other hand, individual differences are lost in a yes-no binary voting process.

As a result of these considerations, the PRLC membership can be assured that its participation in this delphi study has been effectively recorded and summarized. During the next two years, a measured degree of confidence on the part of the membership as a whole can be placed on the following assessed priorities:

#### Primary Level Considerations

Expand the union list of periodicals in printed and on-line formats

Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

#### Secondary Level Considerations

Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.

Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.

Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.

As important as these top considerations may be for the membership as a whole, they should not become the exclusive concern of any implementation program however immediate it may need to be undertaken. Some probability exists that four other areas of concern may emerge as additional factors to be taken into consideration at a tertiary level. This, of course, is not unusual in the transactions and negotiations of everyday affairs which occur in actual library operations.

First, the factor analysis in the study was undertaken as an experimental venture in an effort to throw emphasis on further desperately needed work in the measurement and evaluation of library services. It is hoped that relational factors in addition to top level priorities have been stressed which cannot be ignored either in future studies of programs and services or especially in followup implementation. In a complex modern profession such as librarianship both continuing inservice training and the exploration of relational specializations during program development have become the modus operandi of successful administrators.

Of related consideration and the second of this set of tertiary concerns grows out of the so-called "reciprocal results" of my study such as this but which can also be used to advantage. For example, External imperatives may "force" the PRLC membership to take up a consideration of programs and services that presently were ranked low in the perceptions of membership responses to the delphi. However, imperatives usually cannot be ignored and, in such a case, the PRLC directorate has an estimate of effort that may have to be expended in reorientation publicity and in retraining programs for the membership.

Perhaps of more immediate consideration is the third area of concern which grows out of the second round response as partitioned by the various subgroups (Appendix C). It is apparent from even a quick perusal of results that each subgroup supported the two top priority considerations as did the membership as a whole. Beyond these two priorities there was some divergence in subgroup response. It would seem likely that the membership would not want to ignore these considerations and perhaps work to understand the underlying phenomena.

As a fourth consideration it should be noted that priority assessment is a function of the conditions under which it was studied. Survey studies present their results as a slice of time to be identified for comparative purpose with parallel results at a later date. In this regard, the instruments and other materials of the study are reproduced in the rather full appendices for ease of use on another occasion should the PRLC membership wish to replicate or extend the important work commenced in this study.

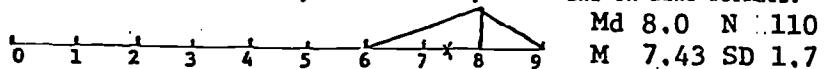
Finally of note, as an extension of these concluding remarks, studies such as this one have not only become eminently practical tools in the administrative enterprise but can also make important contributions to research. The main value of such projects is in the suggestions for further study under controlled conditions which may be taken from it. Certainly if the delphi study were conducted again, a new version of the survey instrument could be based on some previously verified empirical evidence. In addition, the results of the factor analysis could be applied to both the integrity of item construction as well as to the validity of the scaling in appropriate measurement units.

## APPENDIX A

### FIRST..ROUND RESPONSE

Summarized by Median and Interquartile Range  
Mean (\*) Indicated for Comparison

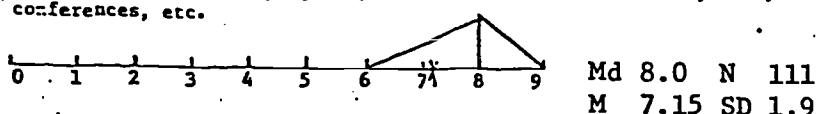
1. Expand the union list of periodicals in printed and on-line formats.



Second  
Round  
Rank

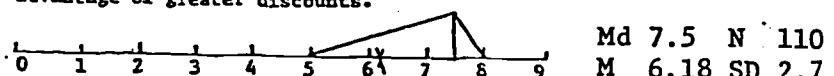
(1)

2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.



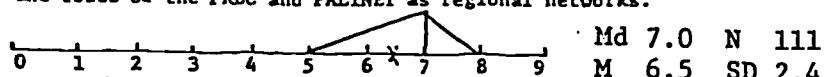
(2)

3. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.



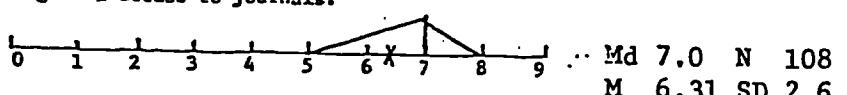
(5)

4. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.



(3)

5. Establish a regional periodical center as a clearinghouse for acquisition, photoduplication and storage depository, as well as providing bulk rates for subscriptions, also to coordinate the reduction in periodicals/serials subscriptions because of reduced library funding and in order to ensure regional access to journals.



(7)

6. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.



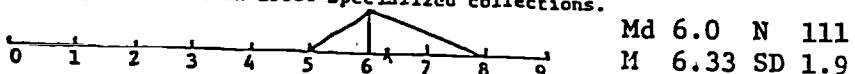
(4)

7. Improve communications between the Center and member libraries and among member libraries by exploiting such communications technology as WATS lines, toll-free Center number, TWX machines, facsimile and satellite transmission.



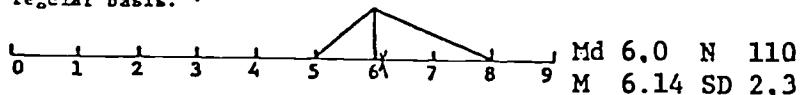
(11)

8. Exchange information about specialized collections.



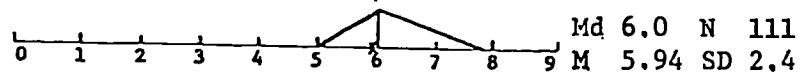
(12)

9. Conduct needs assessment surveys to identify training areas on a regular basis.



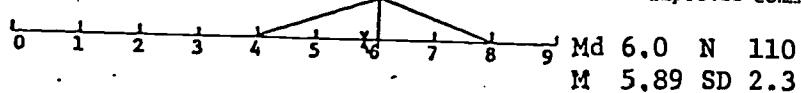
(10)

10. Establish a reference and referral center to provide on-line data base access and searching services as well as regional access to numerical data bases, e.g. census, International Monetary Fund, Federal Reserve, Department of Labor, etc.



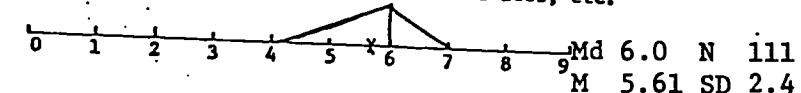
(6)

11. Hold regular programmatic meetings at PRLC trustees' meetings in addition to policy session for the wider exchange of ideas and improved communication



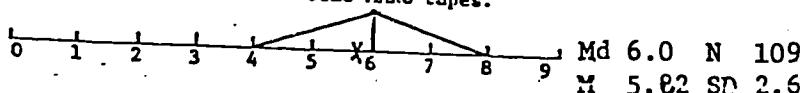
(14)

12. Share with each other the services available in member libraries, e.g. specialized cataloging, programmatic services, etc.



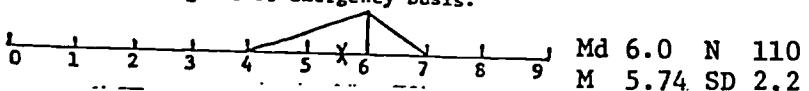
(23)

13. Add a wider range of OCLC services available to PRLC members for example: Center staff identification and implementation of additional PRLC support services for OCLC systems used by member libraries; develop a PRLC regional computer-based network with a linkage to the central OCLC computer system in Columbus; improve the dissemination of information on OCLC from both Center staff and PRLC representatives to OCLC governing boards and operating units; develop programs and packages for cooperative and single member use of OCLC-MARC tapes.



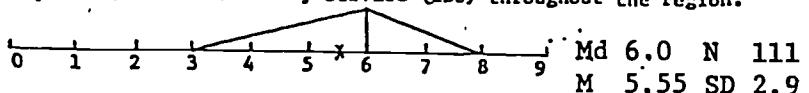
(9)

14. Develop a resource file of consultants who could be available to PRLC members on a regular or emergency basis.



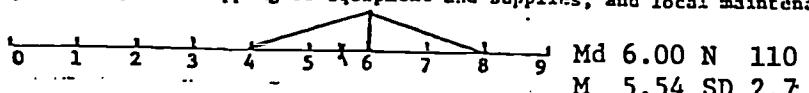
(28)

15. Expand Intrastate Delivery Service (IDS) throughout the region.



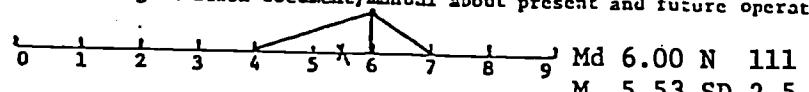
(22)

16. In order to develop greater group power in obtaining lower prices for products and services, establish cooperative contracts which provide members with better binding services and supplies, with cooperative purchasing and swapping of equipment and supplies, and local maintenance.



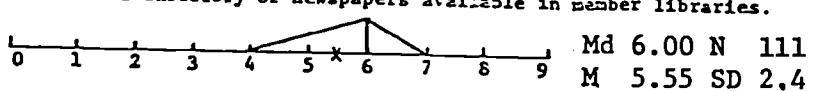
(27)

17. Produce organization document/manual about present and future operations.



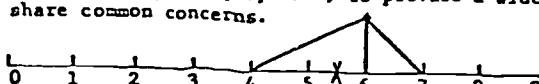
(26)

18. Maintain a directory of newspapers available in member libraries.



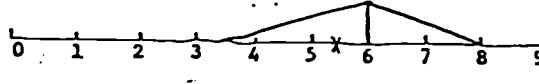
(19)

19. Hold center-sponsored meetings by type of member library (college, university, public, special) to provide a wider exchange of ideas and share common concerns. (24)



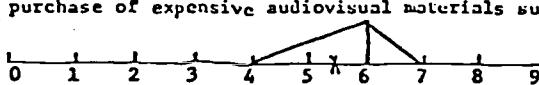
Md 6.0 N 111  
M 5.54 SD 2.4

20. Expand WEBNET (Computerized resource sharing) to all member libraries. (21)



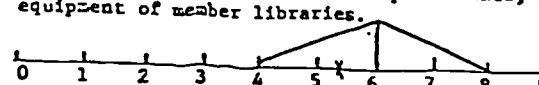
Md 6.0 N 108  
M 5.48 SD 2.5

21. Establish an audiovisual consortium for the bibliographic control and purchase of expensive audiovisual materials such as film, videotapes, etc. (17)



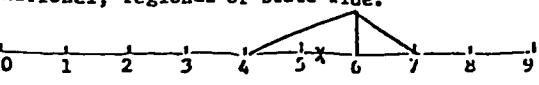
Md 6.0 N 110  
M 5.4 SD 2.5

22. Develop a list of companies or organizations willing to donate equipment or supplies to member libraries; Center file on evaluation of products and equipment and local vendors performance; PKLC technician for servicing equipment of member libraries. (15)



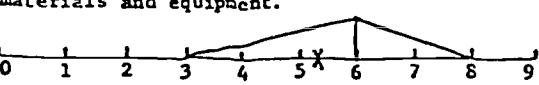
Md 6.0 N 111  
M 5.44 SD 2.7

23. Develop a directory of various kinds of major depository libraries whether national, regional or state-wide. (30)



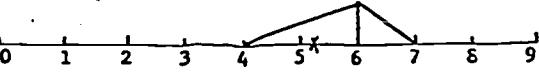
Md 6.0 N 111  
M 5.33 SD 2.8

24. Buy, or provide special price contracts to buy, expendables, library materials and equipment. (31)



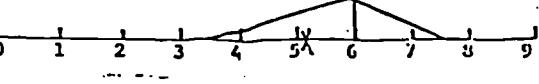
Md 6.0 N 109  
M 5.35 SD 2.8

25. In order to share the expertise of the staff of member libraries, establish a library staff and information exchange. (20)



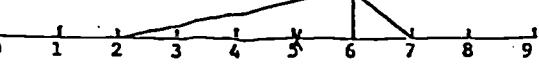
Md 6.0 N 111  
M 5.27 SD 7.5

26. Have Penn State terminal in clearinghouse for ILL for access to their items. (25)



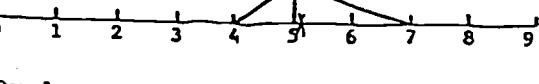
Md 6.0 N 108  
M 5.14 SD 2.7

27. Develop software packages to be used by member libraries, e.g. accounting, circulation, inventory. (34)



Md 6.0 N 111  
M 5.0 SD 2.8

28. Broker other than OCLC services such as RLIN. (32)



Md 5.0 N 111  
M 5.08 SD 2.6

29. Develop cooperative retrospective acquisition of older materials such as newspapers, documents, AV materials. (39)

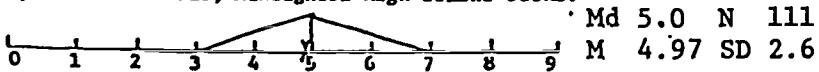


Md 5.0 N 111  
M 5.03 SD 2.3

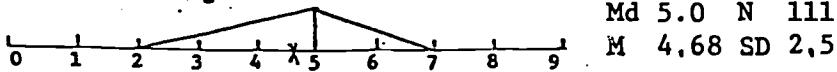
# APPENDIX A

Second  
Round  
Rank

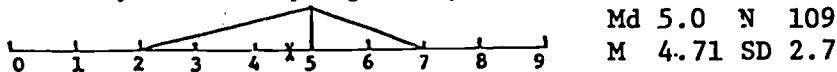
30. Coordinate acquisition policies to identify areas of concern which could be developed cooperatively such as expensive little-used materials, special materials, McNaughton high demand books. (35)



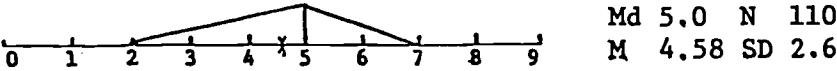
31. Establish a program for Center servicing or loaning of equipment to member libraries for microfilming, photoduplication and microform/media software cleaning. (42)



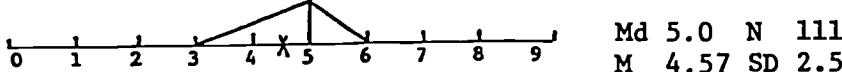
32. To develop a central computing facility to be accessed by member libraries. (44)



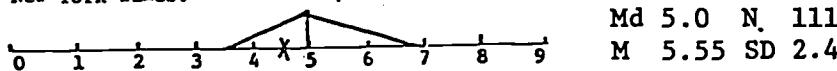
33. Develop a program for materials deacidification and preservation. (48)



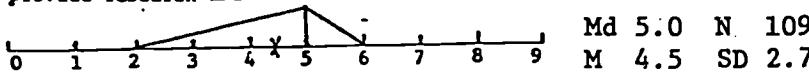
34. Share staff members from various PRCLC libraries to develop special projects such as bibliographies on energy, women's rights, history of science, also to establish programs for coordinating sharing of information on member libraries bibliographical instruction programs. (40)



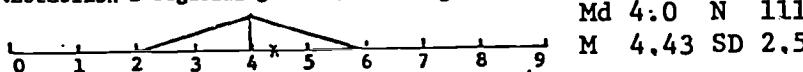
35. Develop more AV modules like the ones for the Monthly Catalog and the New York Times. (33)



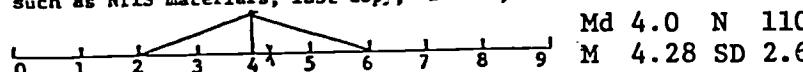
36. Employ a research specialist at PRCLC as a grantsman consultant and to provide research and evaluation assistance to member libraries. (50)



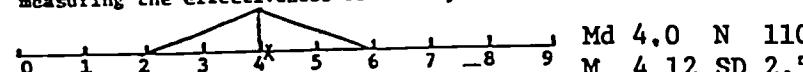
37. Establish a regional gifts and exchange center. (52)



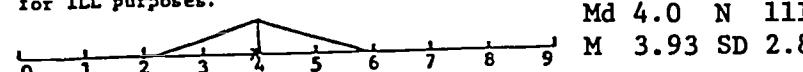
38. Establish a joint depository and storage facility for little-used material such as NTIS materials, last copy, fiction, etc. (54)



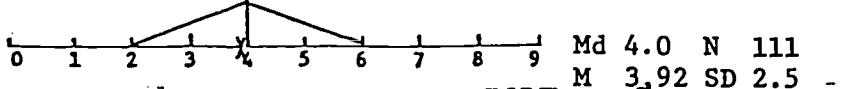
39. Commission special studies especially to develop testing instruments for measuring the effectiveness of library service. (51)



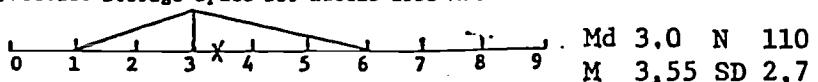
40. Microfilm the card catalog of member libraries for the clearinghouse for ILL purposes. (56)



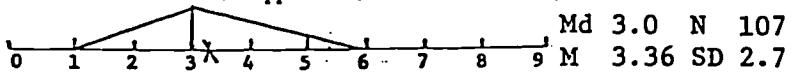
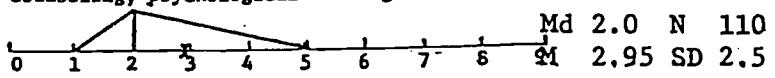
41. Gather and analyze library statistics. (53)



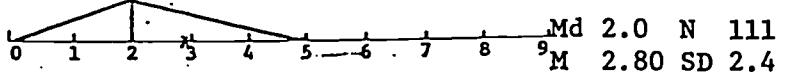
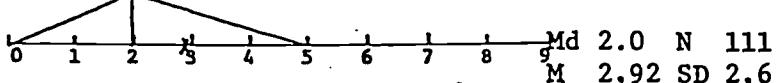
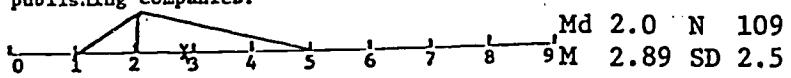
42. Provide storage space for little-used materials. (57)



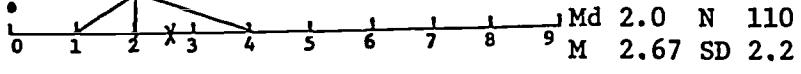
43. Hire a consultant to appraise and evaluate all phases of the PRLC operation. (58)

44. Provide a referral service to access non-library human services such as (64)  
counseling, psychological testing.

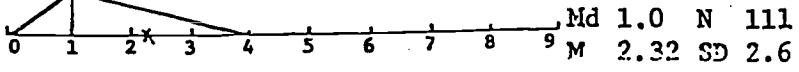
45. Develop one central local history collection. (62)

46. Employ a binder and purchase binding equipment that can be shared by the (63)  
membership.47. Employ a lobbyist at PRLC as an advocate before governmental bodies and (65)  
publishing companies.

48. Establish a regional center for fine-rare books and other expensive items. (66)



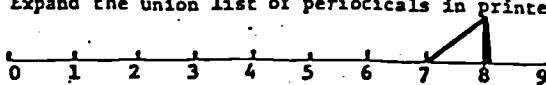
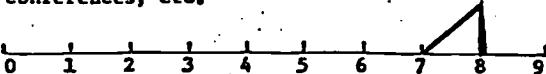
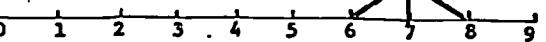
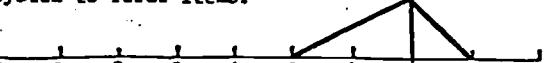
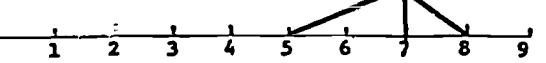
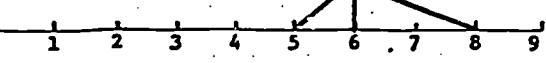
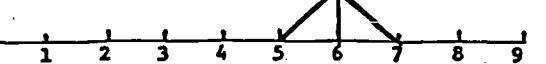
49. Establish a centralized technical processing center. (67)



## APPENDIX B

### SECOND ROUND RESPONSE

Summarized by Median and Interquartile Range as well as Mean and Standard Deviation

Control Check		First Round Rank
01	1. Expand the union list of periodicals in printed and on-line formats.	(1)
		
	M 7.50 N 92 SD 1.30	
02	2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.	(2)
		
	M 7.42 N 92 SD 1.50	
04	3. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.	(3)
		
	M 6.52 N 92 SD 1.80	
06	4. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.	(6)
		
	M 6.40 N 91 SD 2.14	
03	5. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.	(4)
		
	M 6.16 N 91 SD 2.31	
10	6. Establish a reference and referral center to provide on-line data base access and searching services as well as regional access to numerical data bases, e.g. census, International Monetary Fund, Federal Reserve, Department of Labor, etc.	(10)
		
	M 6.26 N 91 SD 1.72	
05	7. Establish a regional periodical center as a clearinghouse for acquisition, photoduplication and storage depository, as well as providing bulk rates for subscriptions, also to coordinate the reduction in periodicals/serials subscriptions because of reduced library funding and in order to ensure regional access to journals.	(5)
		
	M 6.04 N 92 SD 2.11	

APPENDIX D  
Control 1  
Check

First  
Round  
Rank  
(0)

66

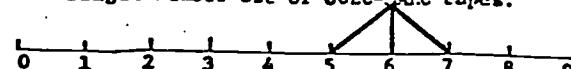
8. Hold membership fees and budget down.



M 5.97 N 76  
SD 2.63

13

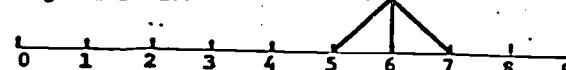
9. Add a wider range of OCLC services available to PRLC members for example: Center staff identification and implementation of additional PRLC support services for OCLC systems used by member libraries; develop a PRLC regional computer-based network with a linkage to the central OCLC computer system in Columbus; improve the dissemination of information on OCLC from both Center staff and PRLC representatives to OCLC governing boards and operating units; develop programs and packages for cooperative and single member use of OCLC-VARC tapes.



M 5.91 N 91  
SD 1.77

09

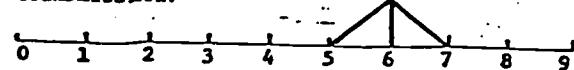
10. Conduct needs assessment surveys to identify training areas on a regular basis.



M 5.89 N 92  
SD 1.64

07

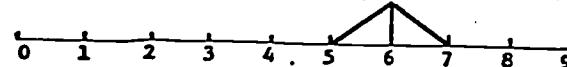
11. Improve communications between the Center and member libraries and among member libraries by exploiting such communications technology as WATS lines, toll-free Center number, TDX machines, facsimile and satellite transmission.



M 6.04 N 92  
SD 2.12

08

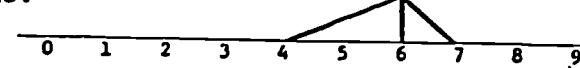
12. Exchange information about specialized collections.



M 5.73 N 92  
SD 1.76

63

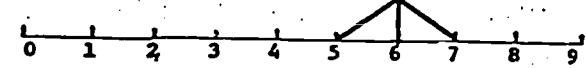
13. Make it easier for public libraries (small and medium sized) to join PRLC.



M 5.71 N 75  
SD 2.17

11

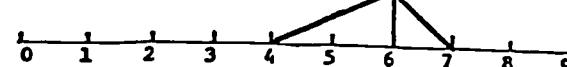
14. Hold regular programmatic meetings at PRLC trustees' meetings in addition to policy session for the wider exchange of ideas and improved communication.



M 5.70 N 92  
SD 1.62

22

15. Develop a list of companies or organizations willing to donate equipment or supplies to member libraries; Center file on evaluation of products and equipment and local vendors performance; PRLC technician for servicing equipment of member libraries.



M 5.62 N 91  
SD 1.85

62

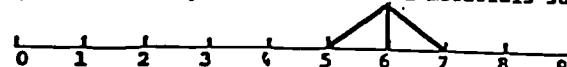
16. Expand clearinghouse services to include searching of bibliographic data bases, RLIN, WLN, PCLN, etc.



M 5.58 N 77  
SD 2.48

21

17. Establish an audiovisual consortium for the bibliographic control and purchase of expensive audiovisual materials such as film, videotapes, etc.



M 5.56 N 91  
SD 1.89

Control  
Check

First  
Round  
Rank

58 18. Separate goals and objectives into short, middle and long-range groups. M 5.47 N 88 SD 2.50 (0)

18 19. Maintain a directory of newspapers available in member libraries. M 5.46 N 91 SD 1.60 (18)

25 20. In order to share the expertise of the staff of member libraries, establish a library staff and information exchange. M 5.45 N 91 SD 1.72 (25)

20 21. Expand WEBNET (Computerized resource sharing) to all member libraries. M 5.45 N 91 SD 2.23 (20)

15 22. Expand Intrastate Delivery Service (IDS) throughout the region. M 5.45 N 91 SD 2.19 (15)

12 23. Share with each other the services available in member libraries, e.g. specialized cataloging, programmatic services, etc. M 5.41 N 92 SD 1.66 (12)

19 24. Hold center-sponsored meetings by type of member library (college, university, public, special) to provide a wider exchange of ideas and share common concerns. M 5.34 N 91 SD 1.81 (19)

26 25. Have Penn State terminal in clearinghouse for ILL for access to their items. M 5.33 N 91 SD 2.10 (26)

17 26. Produce organization document/manual about present and future operations. M 5.32 N 91 SD 2.01 (17)

16 27. In order to develop greater group power in obtaining lower prices for products and services, establish cooperative contracts which provide members with better binding services and supplies, with cooperative purchasing and swapping of equipment and supplies, and local maintenance. M 5.47 N 91 SD 2.24 (16)

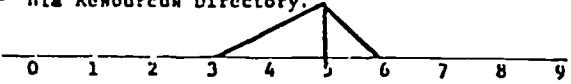
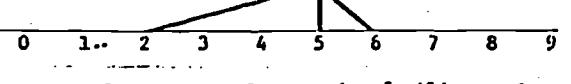
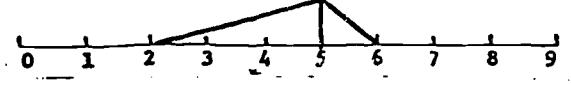
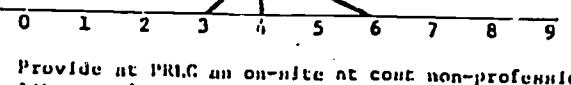
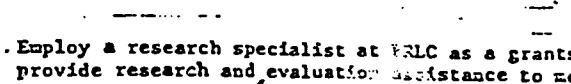
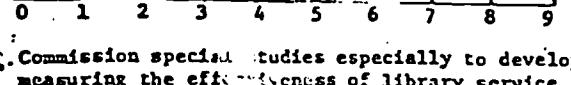
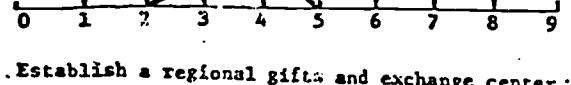
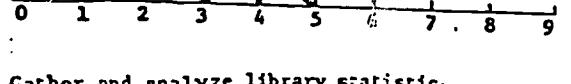
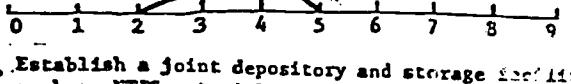
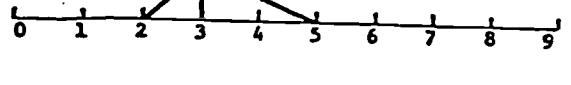
14 28. Develop a resource file of consultants who could be available to PHLC members on a regular or emergency basis. M 5.28 N 91 SD 1.61 (14)

69 29. Clean up present system -- responsive time. M 5.20 N 72 SD 2.40 (0)

Control  
Check

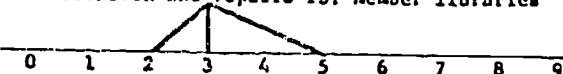
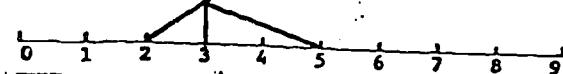
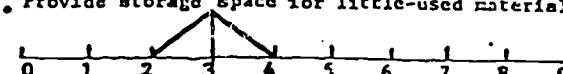
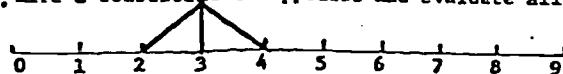
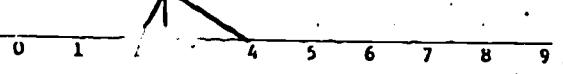
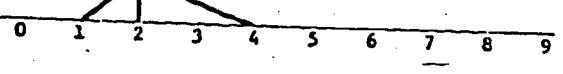
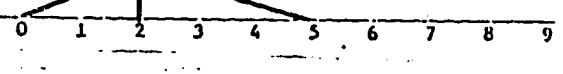
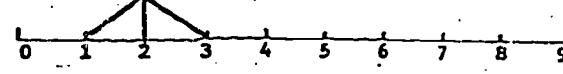
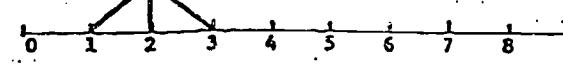
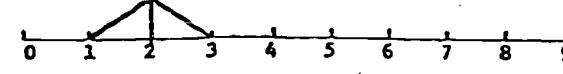
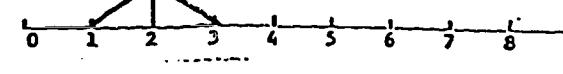
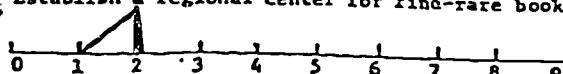
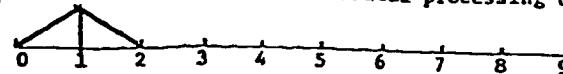
First  
Round  
Rank

23	30. Develop a directory of various kinds of major depository libraries either national, regional or state-wide.	M 5.08 N 91 SD 1.53	(23)
24	31. Buy, or provide special price contracts to buy, expendables, library materials and equipment	M 5.07 N 91 SD 2.15	(24)
28	32. Broker other than OCLC services such as RLIN.	M 4.96 N 91 SD 2.24	(28)
35	33. Develop more AV modules like the ones for the Monthly Catalog and the New York Times.	M 4.95 N 91 SD 1.92	(35)
27	34. Develop software packages to be used by member libraries, e.g. accounting, circulation, inventory.	M 4.87 N 91 SD 2.13	(27)
30	35. Coordinate acquisition policies to identify areas of concern which could be developed cooperatively such as expensive little-used materials, special materials, McNaughton high demand books.	M 4.85 N 91 SD 1.89	(38)
68	36. Unite with PALINET files or with OIIIONET-WV-PA-OIIIONET.	M 4.75 N 75 SD 2.61	(0)
61	37. Explore the use of WEBNET as the basis of a local data base, or for the basis of a cooperative circulation or acquisition system.	M 4.75 N 77 SD 2.68	(0)
67	38. Develop an ILL delivery system with UPS Purulator.	M 4.68 N 71 SD 2.75	(0)
29	39. Develop cooperative retrospective acquisition of older materials such as newspapers, documents, AV materials.	M 4.68 N 91 SD 1.77	(29)
34	40. Share staff members from various PRLC libraries to develop special projects such as bibliographies on energy, women's rights, history of science, also to establish programs for coordinating sharing of information on member libraries bibliographical instruction programs.	M 4.67 N 92 SD 1.97	(34)

54	41. Continue to expand access to information collection through Western Pennsylvania Resources Directory.		M 4.67 N 89 SD 2.26	(0)
31	42. Establish a program for Center servicing or loaning of equipment to member libraries for microfilming, photoduplication and microforms/edits software cleaning.		M 4.60 N 91 SD 1.94	(31)
59	43. Condense the plethora of materials mailed to Trustees.		M 4.40 N 75 SD 2.75	(0)
32	44. To develop a central computing facility to be accessed by member libraries.		M 4.36 N 92 SD 2.27	(32)
55	45. Although explained in general terms elsewhere, no specific focus on cooperative pricing/ordering of periodical publication through jobber discount negotiation. This is of equal importance to monographic purchase.		M 4.67 N 88 SD 2.47	(0)
56	46. Provide programming assistance for computerized public catalogs in libraries (on-line).		M 4.54 N 89 SD 2.52	(0)
57	47. Provide at ERIC an on-line at cost non-professional input into computer a librarians' shelf list for an on-line computerized public catalog.		M 4.37 N 86 SD 2.64	(0)
33	48. Develop a program for materials deacidification and preservation.		M 4.30 N 92 SD 2.10	(33)
64	49. Professional personnel exchange between libraries.		M 4.18 N 76 SD 2.20	(0)
36	50. Employ a research specialist at ERIC as a grantsman consultant and to provide research and evaluation assistance to member libraries.		M 4.15 N 92 SD 2.04	(36)
39	51. Commission special studies especially to develop testing instruments for measuring the effectiveness of library service.		M 3.95 N 92 SD 2.02	(39)
37	52. Establish a regional gifts and exchange center.		M 3.83 N 92 SD 1.77	(37)
41	53. Gather and analyze library statistics.		M 3.66 N 92 SD 1.92	(41)
38	54. Establish a joint depository and storage facility for little-used material such as ERIC materials, last copy, fiction, etc.		M 3.52 N 92 SD 1.49	(38)

Control  
Check

First  
Round  
Rank

52	55. Have PRIC established a regional conservation-preservation center to perform restoration and repairs for member libraries' unique material?		M 3.53 N 89 SD 2.37	(0)
40	56. Microfilm the card catalog of member libraries for the clearinghouse for ILL purposes.		M 3.35 N 92 SD 1.96	(40)
42	57. Provide storage space for little-used materials.		M 3.08 N 92 SD 2.12	(42)
43	58. Hire a consultant to appraise and evaluate all phases of the PRIC operation.		M 2.77 N 92 SD 1.87	(43)
53	59. Train librarians in disseminating information and in performing institutional preservation research.		M 3.12 N 89 SD 2.24	(0)
65	60. Broker professional services.		M 2.61 N 75 SD 2.08	(0)
60	61. Lower the staple on multiple-form invoices to eliminate the need for extracting staple and restapling library's file copy.		M 2.59 N 70 SD 2.60	(0)
45	62. Develop one central local history collection.		M 2.17 N 92 SD 1.62	(45)
46	63. Employ a binder and purchase binding equipment that can be shared by the membership.		M 2.15 N 92 SD 1.75	(46)
44	64. Provide a referral service to access non-library human services such as counseling, psychological testing.		M 2.05 N 92 SD 1.42	(44)
47	65. Employ a lobbyist at PRIC as an advocate before governmental bodies and publishing companies.		M 1.99 N 92 SD 1.69	(47)
48	66. Establish a regional center for fine-rare books and other expensive items.		M 1.89 N 91 SD 1.47	(48)
49	67. Establish a centralized technical processing center.		M 1.50 N 92 SD 1.70	(49)

PARTITIONED RANKINGS  
(Round Two)

Academic Librarians:

Second Round Rank	Control Check (00)
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1. Expand the union list of periodicals in printed and on-line formats.

Md 7.9	N 65	1	(01)
M 7.7	SD 1.3		

2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 7.9	N 65	2	(02)
M 7.5	SD 1.4		

Public Librarians

1. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.

Md 8.0	N 13	3	(03)
M 7.3	SD 2.5		

2. Hold membership fees and budget down.

Md 7.7	N 9	8	(66)
M 6.9	SD 2.1		

3. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 7.5	N 14	2	(02)
M 6.7	SD 2.1		

Second Round Rank	Control Check
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4. Make it easier for public libraries (small and medium sized) to join PRLC.

Md 7.2	N 9	13	(63)
M 6.8	SD 2.3		

5. Expand the Union list of periodicals in printed and on-line formats.

Md 7.0	N 14	1	(01)
M 6.8	SD 1.2		

Special Libraries:

1. Expand the Union list of periodicals in printed and on-line formats.

Md 8.0	N 7	1	(01)
M 7.8	SD 1.1		

2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 7.9	N 7	2	(02)
M 7.4	SD 1.		

3. Establish a reference and referral center to provide on-line data base access and searching services as well as regional access to numerical data bases, e.g. census, International Monetary Fund, Federal Reserve, Department of Labor, etc.

Md 7.3	N 7	6	(10)
M 6.7	SD 2.1		

4. Establish a regional periodical center as a clearinghouse for acquisition, photo/copying and storage depository, as well as providing bulk rates for subscriptions, also to coordinate the reduction in periodicals/serials subscriptions because of reduced library funding and in order to ensure regional access to journals.

Md 7.2	N 7	7	(05)
M 7.0	SD 2.1		

5. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.

Md 7.0	N 7	4	(06)
M 5.8	SD 3.3		

## APPENDIX C

<u>School Librarians:</u>	Second Round Rank	Control Check
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1. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 7.5	N 2	2	(02)
M 7.5	SD 1.2		

2. Establish a reference and referral center to provide on-line data base access and searching services as well as regional access to numerical data bases, e.g. census, International Monetary Fund, Federal Reserve Department of Labor, etc.

Md 7.5	N 2	6	(10)
M 7.5	SD 0.7		

3. Expand the union list of periodicals in printed and on-line formats

Md 7.0	N 2	1	(01)
M 7.0	SD 1.4		

4. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.

Md 7.0	N 2	5	(03)
M 7.0	SD 0.7		

PRLC Staff:

1. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 8.6	N 4	2	(02)
M 8.5	SD 1.0		

2. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.

Md 8.5	N 4	4	(06)
M 8.2	SD 0.9		

3. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.

Md 8.5	N 4	3	(04)
M 8.2	SD 0.9		

## APPENDIX C

Second Round Rank	Control Check
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4. Expand the union list of periodicals in printed and on-line formats.

Md 8.5	N 4	1	(01)
M 8.0	SD 1.4		

5. Explore the use of WEBNET as the basis of a local data base, or for the basis of a cooperative circulation in acquisition system.

Md 8.5	N 4	37	(61)
M 7.7	SD 1.9		

6. Expand clearinghouse services to include searching of bibliographic data bases, RLIN, WLN, PSU, etc.

Md 8.5	N 4	16	(62)
M 7.5	SD 2.4		

7. Provide at PRLC an on-site at cost non-professional input into computer of libraries' shelf list for an on-line computerized public catalog.

Md 8.0	N 3	47	(57)
M 7.3	SD 2.1		

8. In order to develop greater group power in obtaining lower prices for products and services, establish cooperative contracts which provide members with better binding services and supplies, with cooperative purchasing and swapping of equipment and supplies, and local maintenance.

Md 8.0	N 3	27	(16)
M 6.6	SD 3.2		

9. Have Penn State terminal in clearinghouse for ILL for access to their items.

Md 7.8	N 4	25	(26)
M 7.7	SD 0.5		

10. Improve communications between the Center and member libraries and among member libraries by exploiting such communications technology as WATS lines, toll-free Center number, TWX machines, facsimile and satellite transmission.

Md 7.5	N 4	11	(07)
M 7.7	SD 1.5		

11. Broker other than OCLC such as RLIN.

Md 7.5	N 4	32	(28)
M 7.5	SD 1.3		

/

		Second Round Rank	Control Check
12.	Conduct needs assessment surveys to identify training areas on a regular basis.		
	Md 7.5      N 4      SD 1.7	10	(09)
13.	Establish a regional periodical center as a clearinghouse for acquisition, photoduplication and storage depository, as well as providing bulk rates for subscriptions, also to coordinate the reduction in periodicals/serials subscriptions because of reduced library funding and in order to endure regional access to journals.		
	Md 7.5      N 4      SD 2.6	7	(05)
14.	Make it easier for public libraries (small and medium sized) to join PRLC.		
	Md 7.0      N 3      SD 2.0	13	(63)
15.	Develop an ILL delivery system with UPS Purolator.		
	Md 7.0      N 3      SD 3.0	38	(67)
<u>Respondents in Pennsylvania:</u>			
1.	Expand the union list of periodicals in printed and on-line formats.		
	Md 7.7      N 73      SD 1.6	1	(01)
2.	Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.		
	Md 7.7      N 73      SD 1.6	2	(02)
3.	Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.		
	Md 7.0      N 73      SD 2.1	4	(06)

<u>Respondents Outside Pennsylvania:</u>	Second Round Rank	Control Check
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1. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 8.1	N 19		(02)
M 8.1	SD 0.7	2	

2. Expand the union list of periodicals in printed and on-line formats.

Md 7.8	N 19		(01)
M 7.4	SD 1.9	1	

Administrative Librarians:

1. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 7.8	N 64		(02)
M 7.4	SD 1.5	2	

2. Expand the union list of periodicals in printed and on-line formats.

Md 7.7	N 64		(01)
M 7.5	SD 1.2	1	

3. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.

Md 7.0	N 64		(04)
M 6.7	SD 1.7	3	

4. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.

Md 7.0	N 64		(06)
M 6.5	SD 2.2	4	

Staff Librarians:

1. Expand the union list of periodicals in printed and on-line formats.

Md 7.8	N 25		(01)
M 7.4	SD 1.6	1	

Second Round Rank	Control Check
-------------------------	------------------

2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 7.7	N 25	2	(02)
M 7.4	SD 1.5		

3. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.

Md 7.0	N 24	3	(03)
M 6.6	SD 1.8		

4. Hold membership fees and budget down.

Md 7.0	N 22	8	(66)
M 6.4	SD 2.5		

Technical Services Librarians:

1. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 8.1	N 16	2	(02)
M 8.0	SD 0.9		

2. Expand the union list of periodicals in printed and on-line formats.

Md 7.7	N 16	1	(01)
M 7.7	SD 1.7		

3. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.

Md 7.0	N 16	3	(04)
M 6.6	SD 2.2		

PRLC Trustees:

1. Expand the union list of periodicals in printed and on-line formats.

Md 8.0	N 1	1	(01)
M 8.0			

2. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.

Md 7.0	N 1	5	(03)
M 7.0			

**Second  
Round  
Rank**      **Control  
Check**

3. Establish a regional periodical center as a clearinghouse for acquisition, photoduplication and storage depository, as well as providing bulk rates for subscriptions, also to coordinate the reduction in periodicals/serials subscriptions because of reduced library funding and in order to ensure regional access to journals.

Md 7.0 N 1 (05)  
M 7.0 7

#### 4. Exchange information about specialized collections.

Md 7.0 N 1 (08)  
M 7.0 12

5. Maintain a directory of newspapers available in member libraries.

Md 7.0 N 1 19 (18)  
M 7.0

6. Have Penn State terminal in clearinghouse for ILL for access to their items.

Md 7.0 N 1 25 (26)  
M 7.0

**PRLC Member:**

1. Expand the union list of periodicals in printed and on-line formats.

Md 7.8 N 75 (01)  
M 7.5 SD 1.3 1

2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 7.8 N 75 (02)  
M 7.5 SD 1.4 2

**Potential Member of PRLS:**

1. Expand the union list of periodicals in printed and on-line formats.

Md 7.8 N 21 1 (01)  
M 7.5 SD 1.3

Second	Control
Round	Check
Rank	

2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 7.8	N 21	2	(02)
M 7.2	SD 1.9		

3. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.

Md 7.1	N 21	4	(06)
M 6.2	SD 2.6		

Other Networks

1. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.

Md 8.0	N 16	2	(02)
M 7.25	SD 1.2		

2. Expand the union list of periodicals in printed and on-line formats.

Md 7.5	N 16	1	(01)
M 7.19	SD 1.2		

3. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.

Md 7.0	N 16	3	(04)
M 6.94	SD 1.1		

4. Make it easier for public libraries (small and medium sized) to join PRLC.

Md 7.0	N 15	13	(63)
M 6.47	SD 6.47		

5. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.

Md 7.0	N 16	4	(06)
M 6.25	SD 2.3		

6. Separate goals and objectives into short, middle and long-range groups.

Md 7.0	N 16	18	(58)
M 6.19	SD 1.8		

## APPENDIX D

<u>RANKED FACTOR VARIABLES</u>			Variable Control Check in 2nd Round
Second Round Rank	Factor Loadings		
<u>Factor 1:</u>			
21	.82	Expand WEBNET (Computerized resource sharing) to all member libraries.	(20)
37	.78	Explore the use of WEBNET as the basis of a local data base, or for the basis of a cooperative circulation or acquisition system.	(61)
4	.77	Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, eg. using the OCLC ILL system to refer items.	(06)
44	.70	Develop a central computing facility to be accessed by member libraries.	(32)
9	.68	Add a wider range of OCLC services available to PRLC members for example: Center staff identification and implementation of additional PRLC support services for OCLC systems used by member libraries; develop a PRLC regional computer-based network with a linkage to the central OCLC computer system in Columbus; improve the dissemination of information on OCLC from both Center staff and PRLC representatives to OCLC governing boards and operating units; develop programs and packages for cooperative and single member us of OCLC-MARC tapes.	(13)
3	.63	Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.	(04)
16	.61	Expand clearinghouse services to include searching of bibliographic data bases, RLIN, WLN, PSU, etc.	(62)
39	.56	Develop cooperative retrospective acquisition of older materials such as newspapers, documents, AV materials.	(29)
11	.52	Improve communications between the Center and member libraries and among member libraries by exploiting such communications technology as WATS lines, toll-free Center number, TWX machines, facsimile and satellite transmission.	(07)

14 .50 Hold regular programmatic meetings at PRLC trustees' meetings in addition to policy sessions for the wider exchange of ideas and improved communication. (11)

25 .49 Have Penn State terminal in clearinghouse for ILL for access to their items. (26)

22 .46 Expand Intrastate Delivery Service (IDS) throughout the region. (15)

Factor 2:

55 .89 Have PRLC establish a regional conservation-preservation center to perform restoration and repairs for member libraries' unique material. (52)

59 .82 Train librarians in disseminating information and in performing institutional preservation research. (53)

41 .56 Continue to expand access to information collection through Western Pennsylvania Resources Directory. (54)

48 .52 Develop a program for materials deacidification and preservation. (33)

42 .44 Establish a program for Center servicing or loaning of equipment to member libraries for microfilming, photoduplication and microforms/media software cleaning. (31)

Factor 3:

66 .85 Establish a regional center for fine-rare books and other expensive items. (48)

64 .79 Provide a referral service to access non-library human services such as counseling, psychological testing. (44)

62 .78 Develop one central local history collection. (45)

65 .59 Employ a lobbyist at PRLC as an advocate before governmental bodies and publishing companies. (47)

58 .54 Hire a consultant to appraise and evaluate all phases of the PRLC operation. (43)

40 .49 Share staff members from various PRLC libraries to develop special projects such as bibliographies on energy, women's rights, history of science, also to establish programs for coordinating and sharing of information on member libraries bibliographical instruction programs. (34)

## APPENDIX D

### Factor 4:

43	.76	Condense the plethora of materials mailed to Trustees.	(59)
61	.75	Lower the staple on multiple-form invoices to eliminate the need for extracting staple and restapling library's file copy.	(60)
1	.58	Expand the union list of periodicals in printed and on-line formats.	(01)
8	.48	Hold membership fees and budget down.	(66)
18	.40	Separate goals and objectives into short, middle and long-range groups.	(58)

### Factor 5:

12	.74	Exchange information about specialized collections.	(08)
20	.69	In order to share the expertise of the staff of member libraries, establish a library staff and information exchange.	(25)
23	.61	Share with each other the services available in member libraries, e.g. specialized cataloging, programatic services, etc.	(12)
28	.61	Develop a resource file of consultants who could be available to PRLC members on a regular or emergency basis.	(14)
35	.58	Coordinate acquisition policies to identify areas of concern which could be developed cooperatively such as expensive little-used materials, special materials, McNaughton high demand books.	(30)
30	.57	Develop a directory of various kinds of major depository libraries whether national, regional or state-wide.	(23)
26	.54	Produce organization document/manual about present and future operations.	(17)
24	.53	Hold center-sponsored meetings by type of member library (college, university, public, special) to provide a wider exchange of ideas and share common concerns.	(19)

### Factor 6:

57	.89	Provide storage space for little-used materials.	(42)
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APPENDIX D

54 .88 Establish a joint depository and storage facility for little-used material such as NTIS materials, last copy, fiction, etc. (38)

Factor 7:

19 .71 Maintain a directory of newspapers available in member libraries. (18)

51 .57 Commission special studies especially to develop testing instruments for measuring the effectiveness of library service. (39)

53 .54 Gather and analyze library statistics. (41)

32 .45 Broker other than OCLC services such as RLIN. (28)

50 .40 Employ a research specialist at PRLC as a grantsman consultant and to provide research and evaluation assistance to member libraries. (36)

Factor 8:

67 .82 Establish a centralized technical processing center. (49)

63 .73 Employ a binder and purchase binding equipment that can be shared by the membership. (46)

5 .60 Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts. (03)

Factor 9:

56 .79 Microfilm the card catalog of member libraries for the clearinghouse for ILL purposes. (40)

60 .56 Broker printing services. (65)

Factor 10:

33 .78 Develop more AV modules like the ones for the Monthly Catalog and the New York Times. (35)

6 .57 Establish a reference and referral center to provide on-line data base access and searching services as well as regional access to numerical data bases, e.g. census, International Monetary Fund, Federal Reserve, Department of Labor, etc. (10)

## APPENDIX D

### Factor 11:

10	.84	Conduct needs assessment surveys to identify training areas on a regular basis.	(09)
2	.64	Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.	(02)

### Factor 12:

29	.81	Clean up present system -- response time.	(69)
38	.68	Develop an ILL delivery system with UPS Purolator.	(67)
36	.55	Unite with PALINET files or with OHIONET-WV-PA-OHIONET.	(68)

### Factor 13:

46	.87	Provide programming assistance for computerized public catalogs in libraries (on-line).	(56)
49	.72	Provide at PRLC an on-site at cost non-professional input into computer a libraries' shelf list for an on-line computerized public catalog.	(57)
34	.69	Develop software packages to be used by member libraries, e.g. accounting, circulation, inventory.	(27)

### Factor 14:

15	.75	Develop a list of companies or organizations willing to donate equipment or supplies to member libraries; Center file on evaluation of products and equipment and local vendors performance; PRLC technician for servicing equipment of member libraries.	(22)
17	.53	Establish an audiovisual consortium for the bibliographic control and purchase of expensive audiovisual materials such as film, videotapes, etc.	(21)

### Factor 15:

31	.91	Buy, or provide special price contracts to buy, expendables, library materials and equipment.	(24)
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APPENDIX D

27 .77 In order to develop greater group power in obtaining lower prices for products and services, establish co-operative contracts which provide members with better binding services and supplies, with cooperative purchasing and swapping of equipment and supplies, and local maintenance. (16)

45 .73 Although explained in general terms elsewhere, no specific focus on cooperative pricing/ordering of periodical publication through jobber discount negotiation. This is of equal importance to mono-graphic purchase. (55)

Factor 16:

52 .69 Establish a regional gifts and exchange center. (37)

Factor 17:

13 .64 Make it easier for public libraries (small and medium sized to join PRLC. (63)

7 .61 Establish a regional periodical center as a clearing-house for acquisition, photoduplication and storage depository, as well as providing bulk rates for subscriptions because of reduced library funding and in order to ensure regional access to journals. (05)

Factor 18:

49 .41 Professional personnel exchange between libraries. (64)



**University of Pittsburgh**

SCHOOL OF LIBRARY AND INFORMATION SCIENCE

October 22, 1979

MEMO TO: Members . . . the Executive Committee, Pittsburgh Regional Library Center

FROM: Dr. Patrick R. Penland, Coordinator

The Pittsburgh Regional Library Center through its Research and Development Committee has decided to undertake a Delphi study of the services and programs to be implemented by 1982. Several services and programs have already been identified in the several census phases which have been conducted among the PRLC membership.

These services and programs have been enumerated and formatted in the attached list. Several persons have been involved in this process including Ms. Evalyn Clough, Professor Allen Kent and the project coordinator.

The PRLC Research and Development Committee now wishes to have the attached list of 45 items submitted to the Executive Council for review before entering the formal Delphi research phase. As a member of the PRLC Executive Council, you are asked to consider the list of attached items for inclusion and balance. More specifically, please:

1. Review each statement for clarity of language and understanding of intent.
2. Add services and programs that may have been missed.

Please make your comments and additions on one copy of the enclosed list and RETURN IT AS SOON AS POSSIBLE. YOUR IMMEDIATE ATTENTION to this request will substantially add to the quality of results.

Please return to:

Dr. Patrick R. Penland  
PRLC Project Coordinator  
SLIS, University of Pittsburgh  
Pittsburgh, PA 15260

dmb

APPENDIX E

PROGRAMS AND SERVICES TO BE IMPLEMENTED  
by Pittsburgh Regional Library Center by 1982

Delphi Item enumeration conducted in various censuses among the members of the Pittsburgh Regional Library Center. Preliminary version for a Delphi research study.

1. Establish a centralized technical processing center.
2. Establish a reference and referral center to provide on-line data base access and searching services.
3. Microfilm the card catalog of member libraries.
4. Develop local history collections.
5. Set different PRLC membership fees based on services received.
6. Maintain a directory of newspapers available in member libraries.
7. Develop more AV modules like the ones for the Monthly Catalog and the New York Times.
8. Establish a regional gifts and exchange center.
9. Broker the services available in member libraries.
10. Exchange information about specialized collections.
11. Develop a directory of major depository libraries.
12. Establish a library staff and information exchange
13. Expand retrospective acquisition of older materials such as newspapers, documents, AV materials.
14. Provide a referral service to access non-library human services such as counseling, psychological testing.
15. Develop cooperative programs with other consortia and networks.
16. Expand Intrastate Delivery Service (IDS) throughout the region.
17. Expand WEBNET (Computerized resource sharing) to all member libraries.
18. Provide computing facility for use of member libraries.
19. Expand the union list of periodicals in printed and on-line formats.
20. Establish a depository library for state, regional and urban government documents.

21. Establish a regional periodical center as a clearinghouse for acquisition, photoduplication and storage depository, as well as providing bulk rates for subscriptions.
22. Employ a research specialist at PRLC as a grantsman consultant and to provide research and evaluation assistance.
23. Commission special studies especially to develop testing instruments for measuring the effectiveness of library services.
24. Employ a lobbyist at PRLC as an advocate before governmental bodies and publishing companies.
25. Employ a binder and purchase binding equipment that can be shared by the membership.
26. Establish a contract for binding services and binding supplies available for all members.
27. Develop a program for cooperative purchasing and swapping of equipment and supplies.
28. Develop a program for materials deacidification and preservation.
29. Establish contracts with equipment vendors for purchase and local maintainance.
30. Establish an audiovisual consortium for the bibliographic control and purchase of expensive audiovisual materials such as film, videotapes, etc.
31. Establish a microform center for microfilming, photoreproduction and clearinghouse functions.
32. Hold regular programmatic meetings by PRLC in addition to policy sessions for the wider exchange of ideas and improved communication.
33. Conduct continuing education workshops, institutes and other training sessions on a regular basis.
34. Conduct needs assessment surveys to identify training areas on a regular basis.
35. Coordinate acquisition policies to identify areas of concern which could be developed cooperatively such as expensive little-used materials, special materials, McNaughton high demand books.
36. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.
37. Develop a profile resource file for professional staff in areas where special expertise could be accessed.
38. Develop a resource file of consultants who could be available to PRLC members on a regular or emergency basis.

39. Establish a regional center for fine-rare book bindings and other expensive items.
40. Establish a joint depository and storage facility for little used material such as NTIS materials, last copy, fiction, etc.
41. Exploit electronic communication services for PRLC members such as a WATS line, TWX machines, satellite delivery access, facsimile transmission.
42. Establish a clearinghouse for interlibrary loan and set up procedures that will facilitate reciprocal borrowing and rapid delivery.
43. Develop software packages to be used by member libraries.
44. Share staff members from various PRLC libraries to develop special projects such as bibliographies on energy, women's rights, history of science.
45. Add a wider range of OCLC services available to PRLC members such as MARC tapes, systems support, terminals, etc.
46. Other: \_\_\_\_\_
47. Other: \_\_\_\_\_

Please return one copy of this form with your revisions and additions on it to:

Dr. Patrick R. Penland  
PRLC Project Coordinator  
SLIS, University of Pittsburgh  
Pittsburgh, PA 15260

APPENDIX F: FIRST INSTRUMENT

PITTSBURGH REGIONAL LIBRARY CENTER  
CHATHAM COLLEGE, PITTSBURGH, PA. 15232

November 21, 1979

Dear Colleague:

The Pittsburgh Regional Library Center is a multi-state, multi library type consortium with headquarters in Pittsburgh.

Over the past several years PRLC has expanded to include libraries in Western Pennsylvania, Maryland, and West Virginia. PRLC now provides a whole range of services, including access to OCLC, to some 55 libraries in this region. In all of its history PRLC has had as a goal cost savings and resource sharing for libraries.

As we move into the 1980's the PRLC Board of Trustees has determined that it needs to focus the direction of PRLC's mid-range planning efforts. We need to know what services we should offer and which of those services should receive the most attention.

To answer these questions PRLC, with the support of the School of Library and Information Sciences at the University of Pittsburgh, has begun a Delphi study. In this study respondents are being asked to rank order ideas about PRLC that have been proposed over the past several years. Later respondents will have a chance to compare their ideas with the group's combined opinion.

As a librarian in PRLC's region we need to know how you feel about these ideas and concepts. As one of only 200 respondents, your ideas will carry weight in our future design for PRLC. If you have any questions about PRLC as you begin to fill out this questionnaire, please call me or one of the PRLC staff collect at 412-441-6409.

Please return one copy in the enclosed envelope. If you mark your responses on the copy that you keep then you will be able to compare your answers with those of the group as a whole during the later round.

Sincerely,

  
Scott Bruntjen

Executive Director

PITTSBURGH REGIONAL LIBRARY CENTER  
CHATHAM COLLEGE, PITTSBURGH, PA. 15232

(412) 441-5111

November 21, 1979

RE-  
NOV 26 1979

Dear Network Colleague:

ILLINOIS STATE LIBRARY

In September, 1979 the Board of Trustees of the Pittsburgh Regional Library Center authorized a Delphi study to help us determine what PRLC's mid-range goals should be.

In the first round of this study, the Trustees examined ideas that had been proposed for PRLC over the last several years and selected fifty that they thought deserved more attention. In this instrument you and 199 others are being asked to help us expand the list and to rank order the fifty ideas. In a later round you will have a chance to compare your idea with the average.

Please return one copy in the enclosed envelope. If you mark your responses on the copy you keep then you will be able to compare your answers with the group's average during the second round.

I think that it is important that we have input from people like you as well as expressions from our own region. If you have any questions, please call me or Sandee Howard at 412-441-6409.

Please excuse the form letter approach.

Sincerely,

Scott

Scott Bruntjen  
Executive Director

A:32



## APPENDIX F

### University of Pittsburgh SCHOOL OF LIBRARY AND INFORMATION SCIENCE

November 21, 1979

#### PROGRAMS AND SERVICES TO BE IMPLEMENTED IN PRLC by 1982

Dear PRLC Member:

The Pittsburgh Regional Library Center with the support of the School of Library and Information Science, University of Pittsburgh, has undertaken a project to determine which PRLC services and programs should be implemented by 1982.

Your name has been selected as part of a controlled sample of only 200 individuals because we need your opinions. No other respondent can be accepted as a substitute.

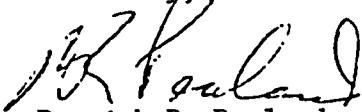
On the following pages, several possible programs and services have been briefly identified. You are asked to rate each statement about a program or service by placing a "/" across a point on the accompanying 10-point scale which best reflects your professional judgment of its importance to you.

Importance can be judged on the basis of how desperately PRLC membership libraries need these services and programs, and by estimating the probable impact of such services and programs in attracting and holding new PRLC members.

When you have completed the ratings, please return the questionnaire in the self-addressed, stamped envelope. Your name will in no way be connected with your replies in the analysis of this study. You will, however, be informed of the results of all the ratings as soon as these are available. You will also be provided with an opportunity to re-evaluate and modify your own rating in light of these averaged results.

These ratings will have significant impact on the development of PRLC before 1982. Your opinions therefore are important in this critical study concerning our PRLC consortium.

Sincerely,



Patrick R. Penland  
Project Coordinator

dmb

Attachments

LIBRARY AND INFORMATION SCIENCES BUILDING PITTSBURGH PA 15261-3430

November 21, 1979

## PITTSBURGH REGIONAL LIBRARY CENTER

### PROGRAMS AND SERVICES TO BE IMPLEMENTED IN PRLC BY 1982

#### DELPHI QUESTIONNAIRE

Your library \_\_\_\_\_

Years of membership in PRLC \_\_\_\_\_

Your Name \_\_\_\_\_

Position \_\_\_\_\_

Your response to the following items is essential because you have been specially selected as a respondent. Without your response, the quality of this survey will be seriously impaired.

The Scale: In all cases the reference points on each of the programs or services have the following meanings:

0 = of no importance

2 = of very little importance

4 = of slight importance

6 = of moderate importance

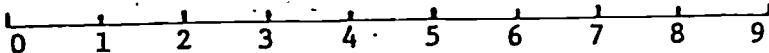
8 = of great importance

9 = of very great importance

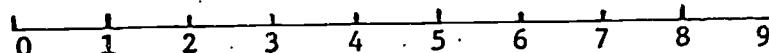
APPENDIX F

DELPHI ITEMS

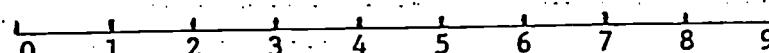
1. Establish a centralized technical processing center.



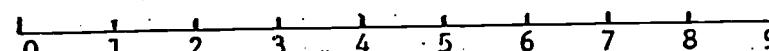
2. Establish a reference and referral center to provide on-line data base access and searching services as well as regional access to numerical data bases, e.g. census, International Monetary Fund, Federal Reserve, Department of Labor, etc.



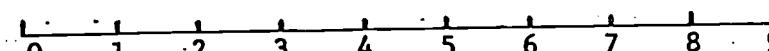
3. Microfilm the card catalog of member libraries for the clearinghouse for ILL purposes.



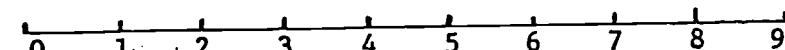
4. Develop one central local history collection.



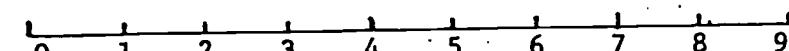
5. Maintain a directory of newspapers available in member libraries.



6. Develop more AV modules like the ones for the Monthly Catalog and the New York Times.



7. Establish a regional gifts and exchange center.

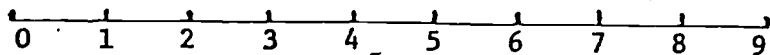


8. Share with each other the services available in member libraries, e.g. specialized cataloging, programmatic services, etc.



APPENDIX F

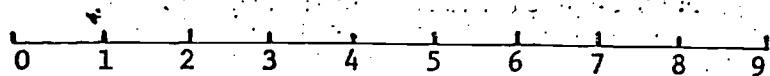
9. Exchange information about specialized collections.



10. Develop a directory of various kinds of major depository libraries whether national, regional or state-wide.



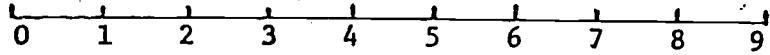
11. In order to share the expertise of the staff of member libraries, establish a library staff and information exchange.



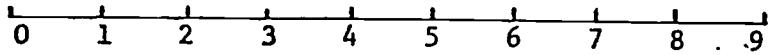
12. Develop cooperative retrospective acquisition of older materials such as newspapers, documents, AV materials.



13. Provide a referral service to access non-library human services such as counseling, psychological testing.



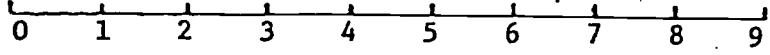
14. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.



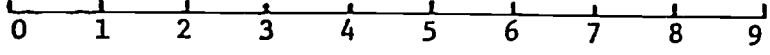
15. Expand Intrastate Delivery Service (IDS) throughout the region.



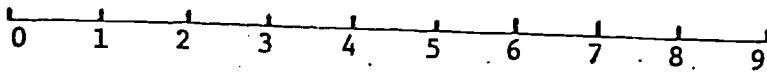
16. Expand WEBNET (Computerized resource sharing) to all member libraries.



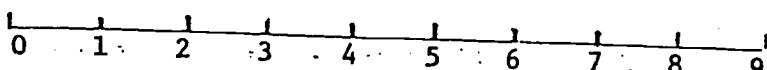
17. To develop a central computing facility to be accessed by member libraries.



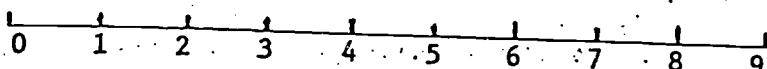
18. Expand the union list of periodicals in printed and on-line formats.



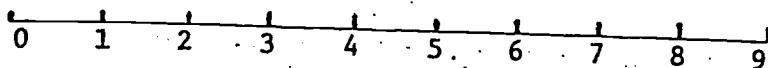
19. Establish a regional periodical center as a clearinghouse for acquisition, photocopying and storage depository, as well as providing bulk rates for subscriptions, also to coordinate the reduction in periodicals/serials subscriptions because of reduced library funding and in order to ensure regional access to journals.



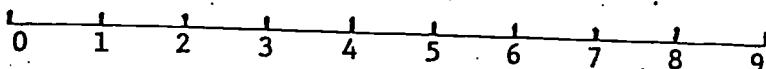
20. Employ a research specialist at PRLC as a grantsman consultant and to provide research and evaluation assistance to member libraries



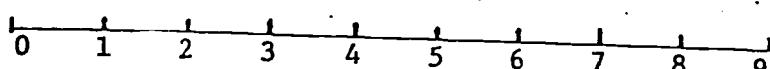
21. Commission special studies especially to develop testing instruments for measuring the effectiveness of library service.



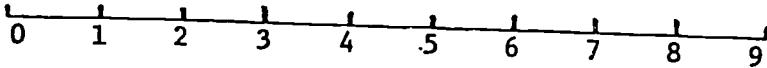
22. Employ a lobbyist at PRLC as an advocate before governmental bodies and publishing companies.



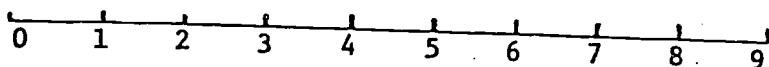
23. Employ a binder and purchase binding equipment that can be shared by the membership.



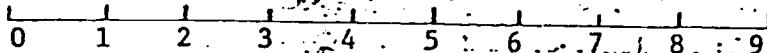
24. In order to develop greater group power in obtaining lower prices for products and services, establish cooperative contracts which provide members with better binding services and supplies, with cooperative purchasing and swapping of equipment and supplies, and local maintenance.



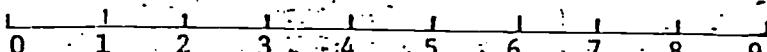
25. Develop a program for materials deacidification and preservation.



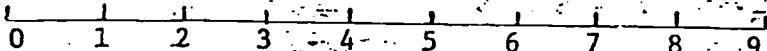
26. Establish an audiovisual consortium for the bibliographic control and purchase of expensive audiovisual materials such as film, videotapes, etc.



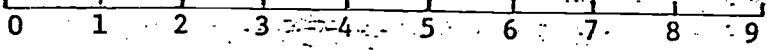
27. Establish a program for Center servicing or loaning of equipment to member libraries for microfilming, photoduplication and microforms/media software cleaning.



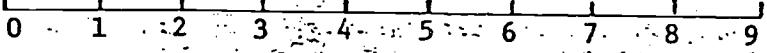
28. Hold regular programmatic meetings at PRLC trustees' meetings in addition to policy session for the wider exchange of ideas and improved communication.



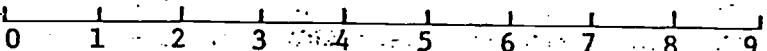
29. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.



30. Conduct needs assessment surveys to identify training areas on a regular basis.



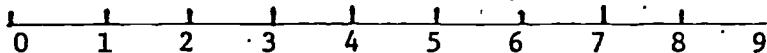
31. Coordinate acquisition policies to identify areas of concern which could be developed cooperatively such as expensive little-used materials, special materials, McNaughton high demand books.



32. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.



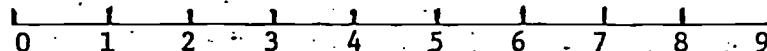
33. Develop a list of companies or organizations willing to donate equipment or supplies to member libraries; Center file on evaluation of products and equipment and local vendors performance; PRLC technician for servicing equipment of member libraries.



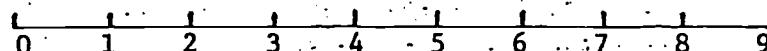
34. Develop a resource file of consultants who could be available to PRLC members on a regular or emergency basis.



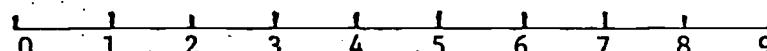
35. Establish a regional center for fine-rare books and other expensive items.



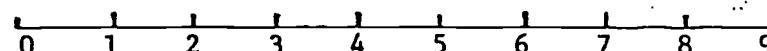
36. Establish a joint depository and storage facility for little-used material such as NTIS materials, last copy, fiction, etc.



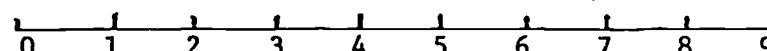
37. Improve communications between the Center and member libraries and among member libraries by exploiting such communications technology as WATS lines, toll-free Center number, TWX machines, facsimile and satellite transmission.



38. Expand the services of the clearinghouse for interlibrary loan and set up procedures that will facilitate rapid delivery, e.g. using the OCLC ILL system to refer items.

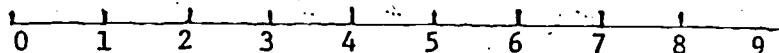


39. Develop software packages to be used by member libraries, e.g. accounting, circulation, inventory.

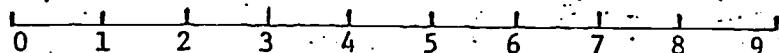


## APPENDIX F

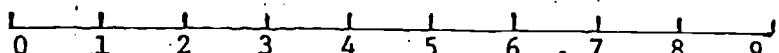
40. Share staff members from various PRLC libraries to develop special projects such as bibliographies on energy, women's rights, history of science, also to establish programs for coordinating sharing of information on member libraries bibliographical instruction programs.



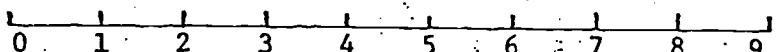
41. Add a wider range of OCLC services available to PRLC members for example: Center staff identification and implementation of additional PRLC support services for OCLC systems used by member libraries; develop a PRLC regional computer-based network with a linkage to the central OCLC computer system in Columbus; improve the dissemination of information on OCLC from both Center staff and PRLC representatives to OCLC governing boards and operating units; develop programs and packages for cooperative and single member use of OCLC-MARC tapes.



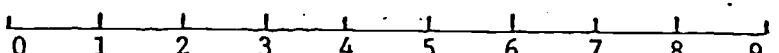
42. Hold center-sponsored meetings by type of member library (college, university, public, special) to provide a wider exchange of ideas and share common concerns.



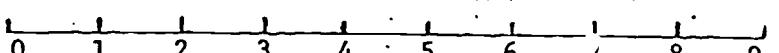
43. Produce organization document/manual about present and future operations.



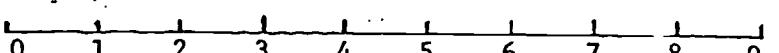
44. Broker other than OCLC services such as RLIN.



45. Buy, or provide special price contracts to buy, expendables, library materials and equipment.



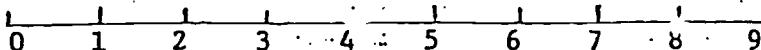
46. Gather and analyze library statistics.



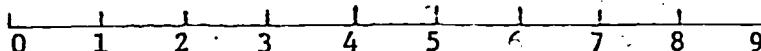
APPENDIX F

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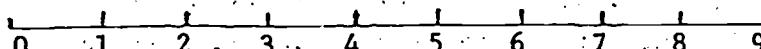
47. Provide storage space for little-used materials.



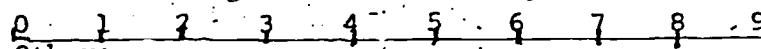
48. Have Penn State terminal in clearinghouse for ILL for access to their items.



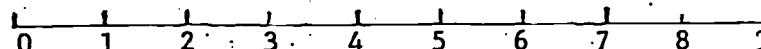
49. Hire a consultant to appraise and evaluate all phases of the PRLC operation.



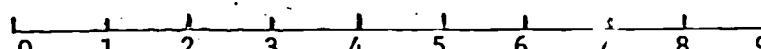
50. Define and document goals and objectives for PRLC and establish a process for monitoring them continuously.



51. Other: \_\_\_\_\_

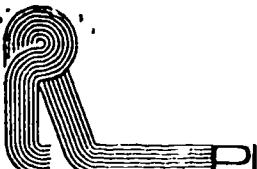


52. Other: \_\_\_\_\_



Please return one copy of this form with your revisions and additions on it to:

Dr. Patrick R. Penland  
PRLC Project Coordinator  
SLIS, University of Pittsburgh  
Pittsburgh, Pennsylvania 15260



PITTSBURGH REGIONAL LIBRARY CENTER  
CHATHAM COLLEGE, PITTSBURGH, PA. 15232

(412) 441-6409

March 7, 1980

Dear Delphi Study Participant:

Late last Fall, PRLC asked you to be one of only 200 respondents in a delphi study that will help us chart our direction in the early 1980's. The persons selected to participate included PRLC Trustees, prospective members, and network opinion leaders from across the country.

Now we would like you to participate again. This time you will be asked to look at the same questions but this time you will know how others answered. You can use the record that you kept from round one to compare your first answers with those of the group as a whole.

At the end of the questionnaire are new questions gathered as part of round one. Please respond to these as well.

As we hope to have a report for our Board meeting in May, I hope that you can return one completed copy in the postage paid, self-addressed envelope before March 31, 1980. If you keep a record of your response on the second copy provided, you will be able to compare your ideas with the group as a whole when we report them to you.

Again, thank you for sharing your views and ideas about PRLC.

Sincerely,

*Scott Bruntjen*

Scott Bruntjen  
Executive Director

SB:mnh

A:42

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER



## APPENDIX G

### University of Pittsburgh

SCHOOL OF LIBRARY AND INFORMATION SCIENCE

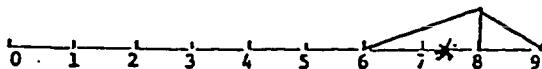
March 5, 1980

#### PROGRAMS AND SERVICES TO BE IMPLEMENTED IN PRLC by 1982

Dear PRLC Member:

This is the second round calling for response in the Delphi Study undertaken by the Pittsburgh Regional Library Center with the support of the School of Library and Information Science, University of Pittsburgh. On the right hand side of the attached questionnaire you will find your previous response summarized by median and interquartile range with the mean (\*) indicated for comparison.

In the following example, the median is 8 and the interquartile range is from 6 to 9 with the mean located at 7.4 (see "cover page" next for definitions).



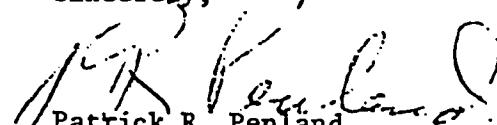
You may wish to use this information when you RE-RATE the several possible programs and services on the left-hand side of the questionnaire. You are asked to re-rate each statement about a program or service listed on the left hand side of the questionnaire by placing a "/" across a point on the accompanying 10-point scale which best reflects your professional judgment of its importance to you.

Importance can be judged on the basis of how desperately PRLC membership libraries need these services and programs, and by estimating the probable impact of such services and programs in attracting and holding new PRLC members.

When you have completed the ratings, please return the questionnaire in the self-addressed, stamped envelope. Your name will in no way be connected with your replies in the analysis of this study. You will, however, be informed of the results of these second ratings as soon as they are available.

These ratings will have significant impact on the development of PRLC before 1982. Your opinions therefore are important in this crucial study concerning our PRLC consortium.

Sincerely,



Patrick R. Penland  
Project Coordinator

db  
Attachment

A:43

LIBRARY AND INFORMATION SCIENCES BUILDING, PITTSBURGH, PA. 15260 (412) 624-5230

PITTSBURGH RETIONAL LIBRARY CENTER  
 PROGRAMS AND SERVICES TO BE IMPLEMENTED  
 IN PRLC BY 1982

## DELPHI QUESTIONNAIRE

Your library \_\_\_\_\_

Years of membership in PRLC \_\_\_\_\_

Your Name \_\_\_\_\_

Position \_\_\_\_\_

Your response to the following items is essential because you have been specially selected as a respondent. Without your response, the quality of this survey will be seriously impaired.

This is the Second Round in this very important study. Your response to this Round of the study is needed to realize full benefits for the PRLC.

The Score: In all cases the reference points on each of the programs or services have the following meanings:

0 = of no importance

2 = of very little importance

4 = of slight importance

6 = of moderate importance

8 = of great importance

9 = of very great importance

DEFINITIONS

The median is that middle point in a distribution of responses where 50% are above and 50% are below it.

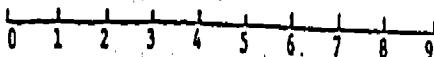
The interquartile ranges include the middle 50% of the responses in a distribution.

The mean is the arithmetic average in a distribution of responses as computed by summing the response and dividing by the number of respondents.

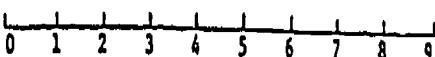
## ROUND TWO DELPHI

Please rate each statement by placing a "X" across a point which reflects its importance to you.

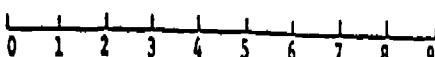
1. Expand the union list of periodicals in printed and on-line formats.



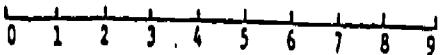
2. Conduct continuing education workshops, institutes and other training sessions on a regular basis and also develop alternate delivery systems for training and workshops, e.g. same presentation in different locations in the region, videotaping of presentation for distribution, telephone conferences, etc.



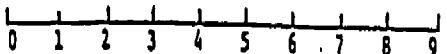
3. Develop cooperative purchasing agreements with various jobbers to take advantage of greater discounts.



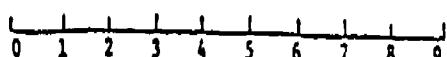
4. Develop cooperative programs with other consortia and networks and study the roles of the PRLC and PALINET as regional networks.



5. Establish a regional periodical center as a clearinghouse for acquisition, photoduplication and storage depository, as well as providing bulk rates for subscriptions, also to coordinate the reduction in periodicals/serials subscriptions because of reduced library funding and in order to ensure regional access to journals.



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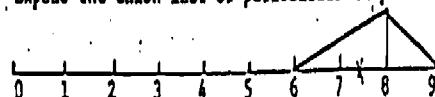


## PREVIOUS RESPONSE

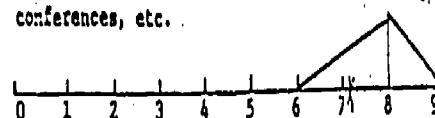
Summarized by Median and Interquartile Range

Mean (\*) Indicated for Comparison

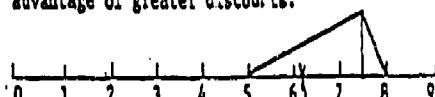
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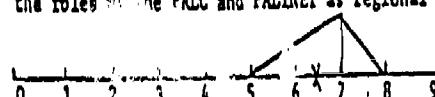
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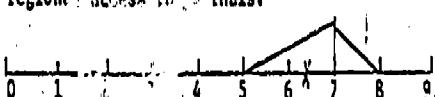
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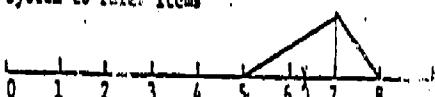
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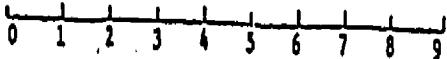
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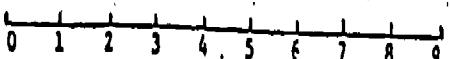
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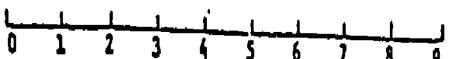
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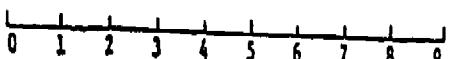
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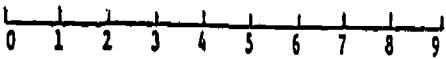
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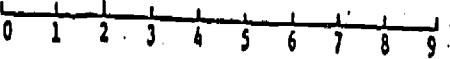
9. Establish a reference and referral center to provide on-line data base access and searching services as well as regional access to numerical data bases, e.g. census, International Monetary Fund, Federal Reserve, Department of Labor, etc.



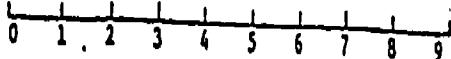
10. Hold regular programmatic meetings at PRLC trustees' meetings in addition to policy session for the wider exchange of ideas and improved communication.



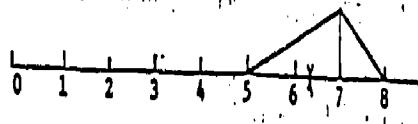
11. Share with each other the services available in member libraries, e.g. specialized cataloging, programmatic services, etc.



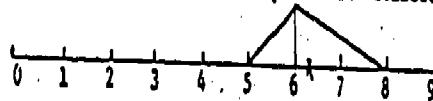
12. Add a wider range of OCLC services available to PRLC members for example: Center staff identification and implementation of additional PRLC support services for OCLC systems used by member libraries; develop a PRLC regional computer-based network with a linkage to the central OCLC computer system in Columbus; improve the dissemination of information on OCLC from both Center staff and PRLC representatives to OCLC governing boards and operating units; develop programs and packages for cooperative and single member use of OCLC-MARC tapes.



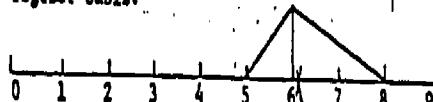
13. Improve communications between the Center and member libraries and among member libraries by exploiting such communications technology as WATS lines, toll-free Center number, TWX machines, facsimile and satellite transmission.



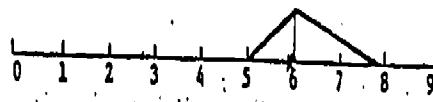
14. Exchange information about specialized collections.



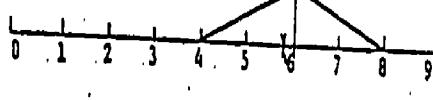
15. Conduct needs assessment surveys to identify training areas on a regular basis.



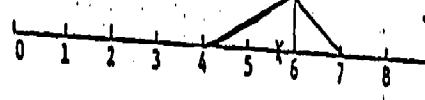
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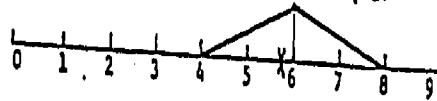
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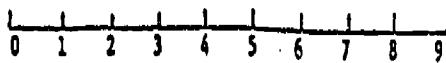
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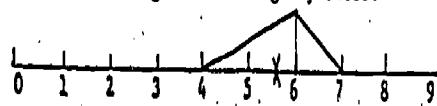
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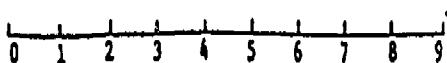
14. Develop a resource file of consultants who could be available to PRMC members on a regular or emergency basis.



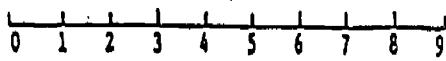
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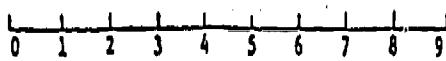
15. Expand Intrastate Delivery Service (IDS) throughout the region.



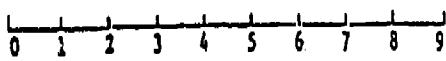
16. In order to develop greater group power in obtaining lower prices for products and services, establish cooperative contracts which provide members with better binding services and supplies, with cooperative purchasing and swapping of equipment and supplies, and local maintenance.



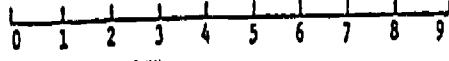
17. Produce organization document/manual about present and future operations.



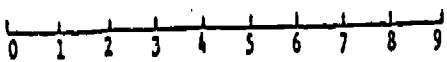
18. Maintain a directory of newspapers available in member libraries.



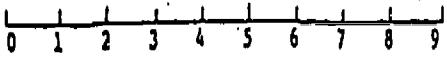
19. Hold center-sponsored meetings by type of member library (college, university, public, special) to provide a wider exchange of ideas and share common concerns.



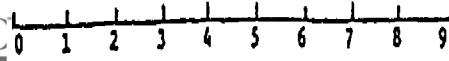
20. Expand WEBNET (Computerized resource sharing) to all member libraries.



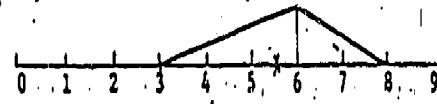
21. Establish an audiovisual consortium for the bibliographic control and purchase of expensive audiovisual materials such as film, videotapes, etc.



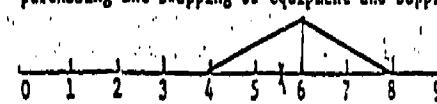
22. Develop a list of companies or organizations willing to donate equipment or supplies to member libraries; Center file on evaluation of products and equipment and local vendors performance; PRMC technician for servicing equipment of member libraries.



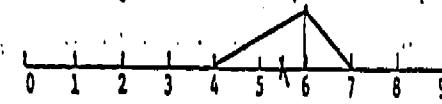
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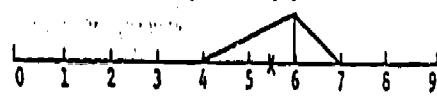
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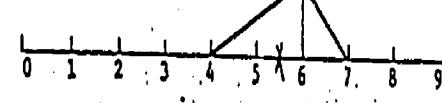
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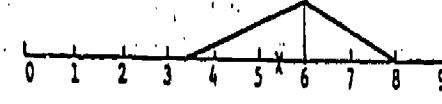
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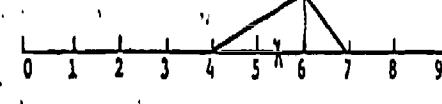
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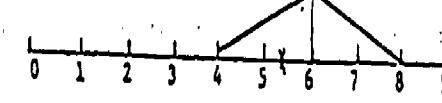
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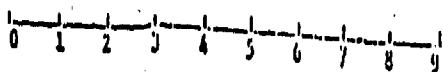
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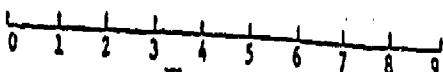
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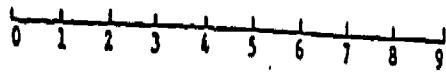
23. Develop a directory of various kinds of major depository libraries whether national, regional or state-wide.



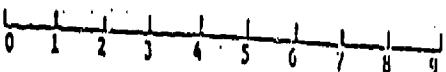
24. Buy, or provide special price contracts to buy; expendables, library materials and equipment.



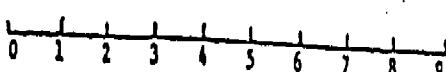
25. In order to share the expertise of the staff of member libraries, establish a library staff and information exchange.



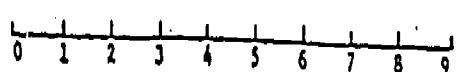
26. Have Penn State terminal in clearinghouse for ILL for access to their items.



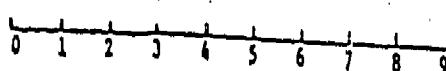
27. Develop software packages to be used by member libraries, e.g. accounting, circulation, inventory.



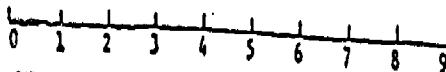
28. Broker other than OCLC services such as RLIN.



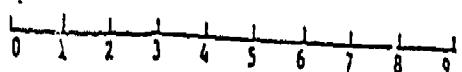
29. Develop cooperative retrospective acquisition of older materials such as newspapers, documents, AV materials.



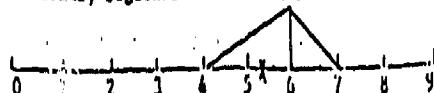
30. Coordinate acquisition policies to identify areas of concern which could be developed cooperatively such as expensive little-used materials, special materials, McNaughton high demand books.



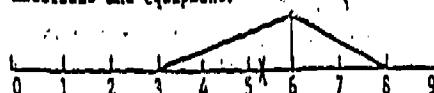
31. Establish a program for Center servicing or loaning of equipment to member libraries for microfilming, photoduplication and microforms/media software cleaning.



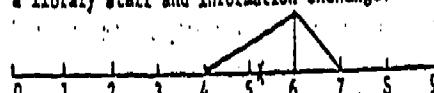
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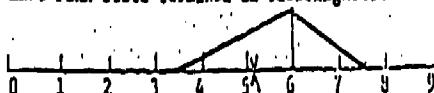
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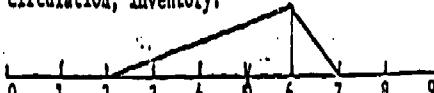
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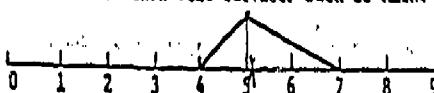
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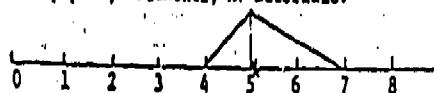
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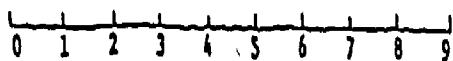
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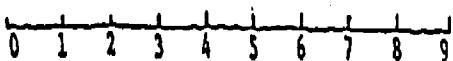
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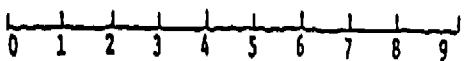
31. To develop a central computing facility to be accessed by member libraries.



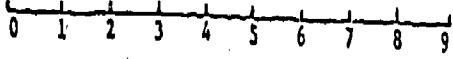
32. Develop a program for materials deacidification and preservation.



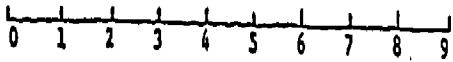
33. Share staff members from various PRCLC libraries to develop special projects such as bibliographies on energy, women's rights, history of science, also to establish programs for coordinating sharing of information on member libraries bibliographical instruction programs.



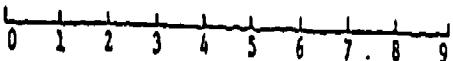
34. Develop more AV modules like the ones for the Monthly Catalog and the New York Times.



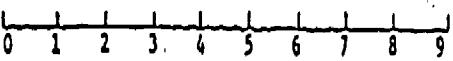
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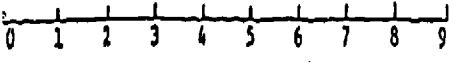
36. Establish a regional gifts and exchange center.



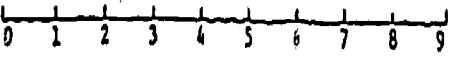
37. Establish a joint depository and storage facility for little-used material such as NTIS materials, last copy, fiction, etc.



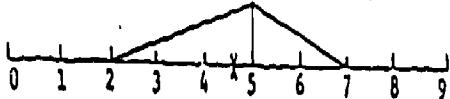
38. Commission special studies especially to develop testing instruments for measuring the effectiveness of library service.



39. Microfilm the card catalog of member libraries for the clearinghouse for ILL purposes.



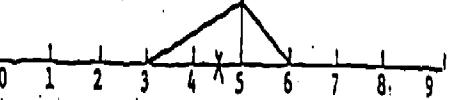
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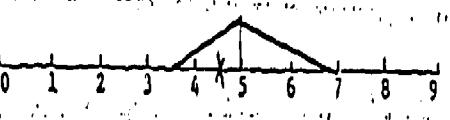
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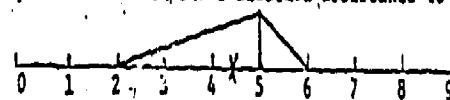
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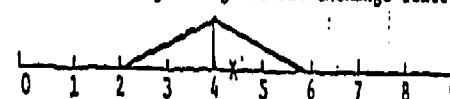
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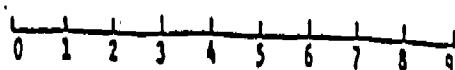
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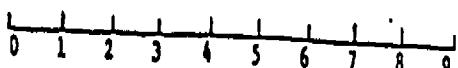
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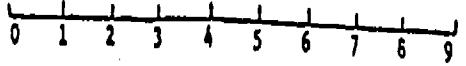
41. Gather and analyze library statistics.



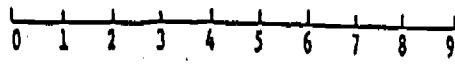
42. Provide storage space for little-used materials.



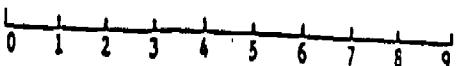
43. Hire a consultant to appraise and evaluate all phases of the PRLC operation.



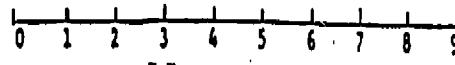
44. Provide a referral service to access non-library human services such as counseling, psychological testing.



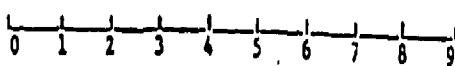
45. Develop one central local history collection.



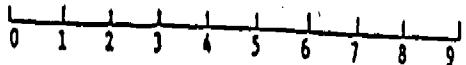
46. Employ a binder and purchase binding equipment that can be shared by the membership.



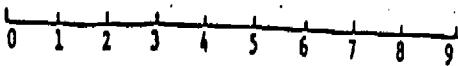
47. Employ a lobbyist at PRLC as an advocate before governmental bodies and publishing companies.



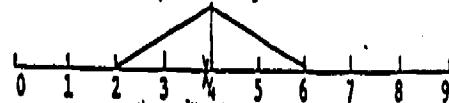
48. Establish a regional center for fine-tare books and other expensive items.



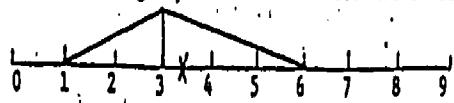
49. Establish a centralized technical processing center.



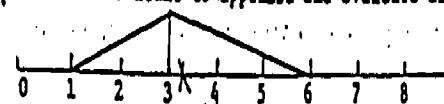
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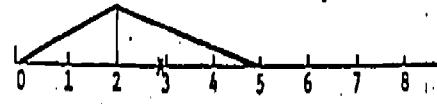
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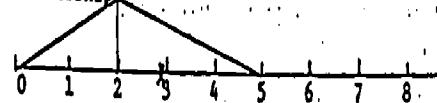
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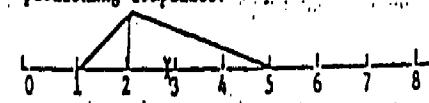
45. Develop one central local history collection.



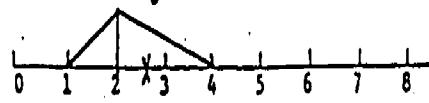
46. Employ a binder and purchase binding equipment that can be shared by the membership.



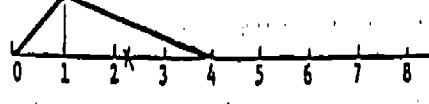
47. Employ a lobbyist at PRLC as an advocate before governmental bodies and publishing companies.



48. Establish a regional center for fine-tare books and other expensive items.



49. Establish a centralized technical processing center.



APPENDIX G

50. Other: \_\_\_\_\_

0 1 2 3 4 5 6 7 8 9

51. Other: \_\_\_\_\_

0 1 2 3 4 5 6 7 8 9

Please return one copy of this form with your revisions and additions on it to:

Dr. Patrick R. Penland  
PRLC Project Coordinator  
SLIS, University of Pittsburgh  
Pittsburgh, Pennsylvania 15260

ADDITIONAL ITEMS FOR CONSIDERATION WHICH WERE  
CONTRIBUTED IN ROUND ONE

52. Have PRIC established a regional conservation-preservation center to perform restoration and repairs for member libraries' unique material?

0 1 2 3 4 5 6 7 8 9

53. Train librarians in disseminating information and in performing institutional preservation research.

0 1 2 3 4 5 6 7 8 9

54. Continue to expand access to information collection through Western Pennsylvania Resources Directory.

0 1 2 3 4 5 6 7 8 9

55. Although explained in general terms elsewhere, no specific focus on cooperative pricing/ordering of periodical publication through jobber discount negotiation. This is of equal importance to monographic purchase.

0 1 2 3 4 5 6 7 8 9

56. Provide programming assistance for computerized public catalogs in libraries (on-line).

0 1 2 3 4 5 6 7 8 9

57. Provide at PRIC an on-site at cost non-professional input into computer a libraries' shelf list for an on-line computerized public catalog.

0 1 2 3 4 5 6 7 8 9

58. Separate goals and objectives into short, middle and long-range groups.

0 1 2 3 4 5 6 7 8 9

## APPENDIX G

59. Condense the plethora of materials mailed to Trunkcom.

0 1 2 3 4 5 6 7 8 9

60. Lower the staple on multiple-form invoices to eliminate the need for extracting staple and restapling library's file copy.

0 1 2 3 4 5 6 7 8 9

61. Explore the use of WEBNET as the basis of a local data base, or for the basis of a cooperative circulation or acquisition system.

0 1 2 3 4 5 6 7 8 9

62. Expand clearinghouse services to include searching of bibliographic data bases, RLIN, WLN, RSL, etc.

0 1 2 3 4 5 6 7 8 9

63. Make it easier for public libraries (small and medium sized) to join PRIM.

0 1 2 3 4 5 6 7 8 9

64. Professional personnel exchange between libraries.

0 1 2 3 4 5 6 7 8 9

65. Broker printing services.

0 1 2 3 4 5 6 7 8 9

66. Hold membership fees and budget down.

0 1 2 3 4 5 6 7 8 9

67. Develop an TLL delivery system with UPS Purolator.

0 1 2 3 4 5 6 7 8 9

68. Unite with PALINET files or with OJIONET-V or OJIONET.

0 1 2 3 4 5 6 7 8 9

69. Clean up present system -- response time.

0 1 2 3 4 5 6 7 8 9

Please return one copy of this form with your revisions on it to:

Dr. Patrick R. Penland  
PRIM Project Coordinator  
SLIS, University of Pittsburgh  
Pittsburgh, Pennsylvania 15260

APPENDIX H: CODING MATERIALS

PRLC DELPHI SURVEY  
ID Information

Library Type:  
(check one only)

Special

Public

School

Academic

PRLC Staff

Position Type:  
(check one only)

Administrator

Staff

Technical Services

Trustee (non-librarian)

Membership Status:  
(check one only)

PRLC Member

Potential Member

Membership Duration  
In years (rounded): \_\_\_\_\_

Other Network:

\_\_\_\_\_

Round:

1

Geographic Location:

Pennslyvania: \_\_\_\_\_

West Virginia plus Maryland: \_\_\_\_\_

PRLC DELPHI SURVEY  
ID Information

Library Type:  
(check one only)

Special

Public

School

Academic

PRLC Staff

Position Type:  
(check one only)

Administrator

Staff

Technical Services

Trustee (non-librarian)

Membership Status:  
(check one only)

PRLC Member

Potential Member

Membership Duration  
In years (rounded): \_\_\_\_\_

Other Network:

\_\_\_\_\_

Round:

2

Geographic Location:

Pennslyvania: \_\_\_\_\_

West Virginia plus Maryland: \_\_\_\_\_

PALC DELPHI SURVEY  
ID Information

Library Type:  
(check one only)

Position Type:  
(check one only)

Membership Status:  
(check one only)

Special \_\_\_\_\_

Administrator \_\_\_\_\_

PRLC Member

Public \_\_\_\_\_

Staff \_\_\_\_\_

Potential  
Member

School \_\_\_\_\_

Technical  
Services \_\_\_\_\_

Membership Duration  
In years (rounded):  
\_\_\_\_\_

Academic \_\_\_\_\_

Trustee (non-  
librarian) \_\_\_\_\_

PRLC Staff \_\_\_\_\_

Other Network:

\_\_\_\_\_

Geographic Location:

Pennslyvania: \_\_\_\_\_

Round:

1

West Virginia

plus Maryland: \_\_\_\_\_

PRLC DELPHI SURVEY  
ID Information

Library Type:  
(check one only)

Position Type:  
(check one only)

Membership Status:  
(check one only)

Special \_\_\_\_\_

Administrator \_\_\_\_\_

PRLC Member

Public \_\_\_\_\_

Staff \_\_\_\_\_

Potential  
Member

School \_\_\_\_\_

Technical  
Services \_\_\_\_\_

Membership Duration  
In years (rounded):  
\_\_\_\_\_

Academic \_\_\_\_\_

Trustee (non-  
librarian) \_\_\_\_\_

PRLC Staff \_\_\_\_\_

Other Network:

\_\_\_\_\_

Geographic Location:

Pennslyvania: \_\_\_\_\_

Round:

2

West Virginia  
plus Maryland: \_\_\_\_\_

## DELPHI SURVEY

Library Type Encoding Dictionary  
(Column 4)

<u>Information</u>	<u>Punch</u>	<u>Punch</u>	<u>Information</u>
Academic	4	1	Special
PRLC Staff	5	2	Public
Public	2	3	School
School	3	4	Academic
Special	1	5	PRLC Staff

Position Type Encoding Directory  
(Column 6)

<u>Information</u>	<u>Punch</u>	<u>Punch</u>	<u>Information</u>
Administrator	1	1	Administrator
Staff	2	2	Staff
Technical Services	3	3	Technical Services
Trustee (nonlibrarian)	4	4	Trustee (nonlibrarian)

Membership Status Encoding Dictionary  
(Column 8)

<u>Information</u>	<u>Punch</u>	<u>Punch</u>	<u>Information</u>
Potential Member	2	1	PRLC Member
PRLC Member	1	2	Potential Member

Geographic Location Encoding Dictionary  
(Column 12)

<u>Information</u>	<u>Punch</u>	<u>Punch</u>	<u>Information</u>
Pennsylvania	1	1	Pennsylvania
West Virginia plus Maryland	2	2	West Virginia plus Maryland

Other Network (Column 10): punch 1Round (Column 14): punch 1

## PITTSBURGH REGIONAL LIBRARY CENTER

(PRLC)

## DELPHI SURVEY

Coding Dictionary

<u>Information</u>	<u>Column Number(s)</u>	<u>Column Number(s)</u>	<u>Information</u>
Document Number	1-3	1-3	Document Number
Geographic Location	12	4	Library Type
Library Type	4	6	Position Type
Membership Duration	16-17	8	Membership Status
Membership Status	8	10	Other Networks
Other Networks	10	12	Geographic Location
Position Type	6	14	Round
Question #1	20	16-17	Membership Duration
Question #2	21	20	Question #1
Question #3	22	21	Question #2
Question #4	23	22	Question #3
Question #5	24	23	Question #4
Question #6	25	24	Question #5
Question #7	26	25	Question #6
Question #8	27	26	Question #7
Question #9	28	27	Question #8
Question #10	29	28	Question #9
Question #11	30	29	Question #10
Question #12	31	30	Question #11
Question #13	32	31	Question #12
Question #14	33	32	Question #13
Question #15	34	33	Question #14
Question #16	35	34	Question #15
Question #17	36	35	Question #16 /
Question #18	37	36	Question #17
Question #19	38	37	Question #18
Question #20	39	38	Question #19
Question #21	40	39	Question #20
Question #22	41	40	Question #21
Question #23	42	41	Question #22
Question #24	43	42	Question #23
Question #25	44	43	Question #24

<u>Information</u>	<u>Column Number(s)</u>	<u>Column Number(s)</u>	<u>Information</u>
Question #26	45	44	Question #25
Question #27	46	45	Question #26
Question #28	47	46	Question #27
Question #29	48	47	Question #28
Question #30	49	48	Question #29
Question #31	50	49	Question #30
Question #32	51	50	Question #31
Question #33	52	51	Question #32
Question #34	53	52	Question #33
Question #35	54	53	Question #34
Question #36	55	54	Question #35
Question #37	56	55	Question #36
Question #38	57	56	Question #37
Question #39	58	57	Question #38
Question #40	59	58	Question #39
Question #41	60	59	Question #40
Question #42	61	60	Question #41
Question #43	62	61	Question #42
Question #44	63	62	Question #43
Question #45	64	63	Question #44
Question #46	65	64	Question #45
Question #47	66	65	Question #46
Question #48	67	66	Question #47
Question #49	68	67	Question #48
Question #50	69	68	Question #49
Question #51	70	69	Question #50
Question #52	71	70	Question #51
Round	14	71	Question #52

## DELPHI SURVEY

Second RoundCoding Dictionary

<u>Information</u>	<u>Column Number(s)</u>	<u>Column Number(s)</u>	<u>Information</u>
Document Number	1-3	1-3	Document Number
Geographic Location	12	4	Library Type
Library Type	4	6	Position Type
Membership Duration	16-17	8	Membership Status
Membership Status	8	10	Other Networks
Other Networks	10	12	Geographic Location
Position Type	6	14	Round
Question #1	20	16-17	Membership Duration
Question #2	21	20	Question #1
Question #3	22	21	Question #2
Question #4	23	22	Question #3
Question #5	24	23	Question #4
Question #6	25	24	Question #5
Question #7	26	25	Question #6
Question #8	27	26	Question #7
Question #9	28	27	Question #8
Question #10	29	28	Question #9
Question #11	30	29	Question #10
Question #12	31	30	Question #11
Question #13	32	31	Question #12
Question #14	33	32	Question #13
Question #15	34	33	Question #14
Question #16	35	34	Question #15
Question #17	36	35	Question #16
Question #18	37	36	Question #17
Question #19	38	37	Question #18
Question #20	39	38	Question #19
Question #21	40	39	Question #20
Question #22	41	40	Question #21
Question #23	42	41	Question #22
Question #24	43	42	Question #23

<u>Information</u>	<u>Column Number(s)</u>	<u>Column Number(s)</u>	<u>Information</u>
Question #25	44	43	Question #24
Question #26	45	44	Question #25
Question #27	46	45	Question #26
Question #28	47	46	Question #27
Question #29	48	47	Question #28
Question #30	49	48	Question #29
Question #31	50	49	Question #30
Question #32	51	50	Question #31
Question #33	52	51	Question #32
Question #34	53	52	Question #33
Question #35	54	53	Question #34
Question #36	55	54	Question #35
Question #37	56	55	Question #36
Question #38	57	56	Question #37
Question #39	58	57	Question #38
Question #40	59	58	Question #39
Question #41	60	59	Question #40
Question #42	61	60	Question #41
Question #43	62	61	Question #42
Question #44	63	62	Question #43
Question #45	64	63	Question #44
Question #46	65	64	Question #45
Question #47	66	65	Question #46
Question #48	67	66	Question #47
Question #49	68	67	Question #48
Question #50	69	68	Question #49
Question #51	70	69	Question #50
Question #52	71	70	Question #51
Question #53	72	71	Question #52
Question #54	73	72	Question #53
Question #55	74	73	Question #54
Question #56	75	74	Question #55
Question #57	76	75	Question #56
Question #58	77	76	Question #57

Page 3  
PRLC Delphi Survey  
Second Round  
Coding Dictionary

<u>Information</u>	<u>Column Number(s)</u>	<u>Column Number(s)</u>	<u>Information</u>
Question #59	78	77	Question #58
Question #60	79	78	Question #59
Question #61	80	79	Question #60
Round	14	80	Question #61

Card Number 2

Card Number	5	1-3	Document Number
Document Number	1-3	5	Card Number
Question #62	7	7	Question #62
Question #63	8	8	Question #63
Question #64	9	9	Question #64
Question #65	10	10	Question #65
Question #66	11	11	Question #66
Question #67	12	12	Question #67
Question #68	13	13	Question #68
Question #69	14	14	Question #69

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SELECTED REFERENCES

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